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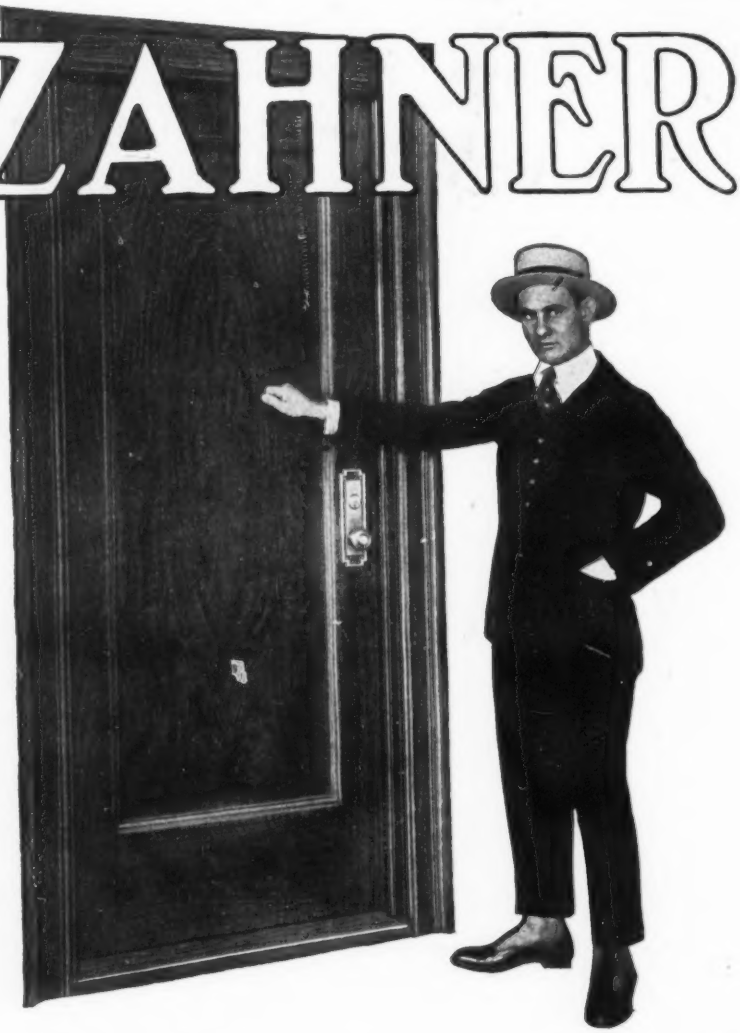

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VOL. XXXVIII. No. 5 NOVEMBER, 1915 SERIAL NO. 206

THE ARCHITECTVRAL RECORD

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TERRACE POOL—ESTATE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA. D. KNICKERBACKER BOYD, ARCHITECT.

THE ARCHITECTVRAL RECORD

VOLVME XXXVIII — NVMBER V

NOVEMBER, 1915

The RESIDENCE of CHARLES S. WALTON, ESQ.

D. Knickerbacker Boyd, Architect

By Robert Dennis Murray

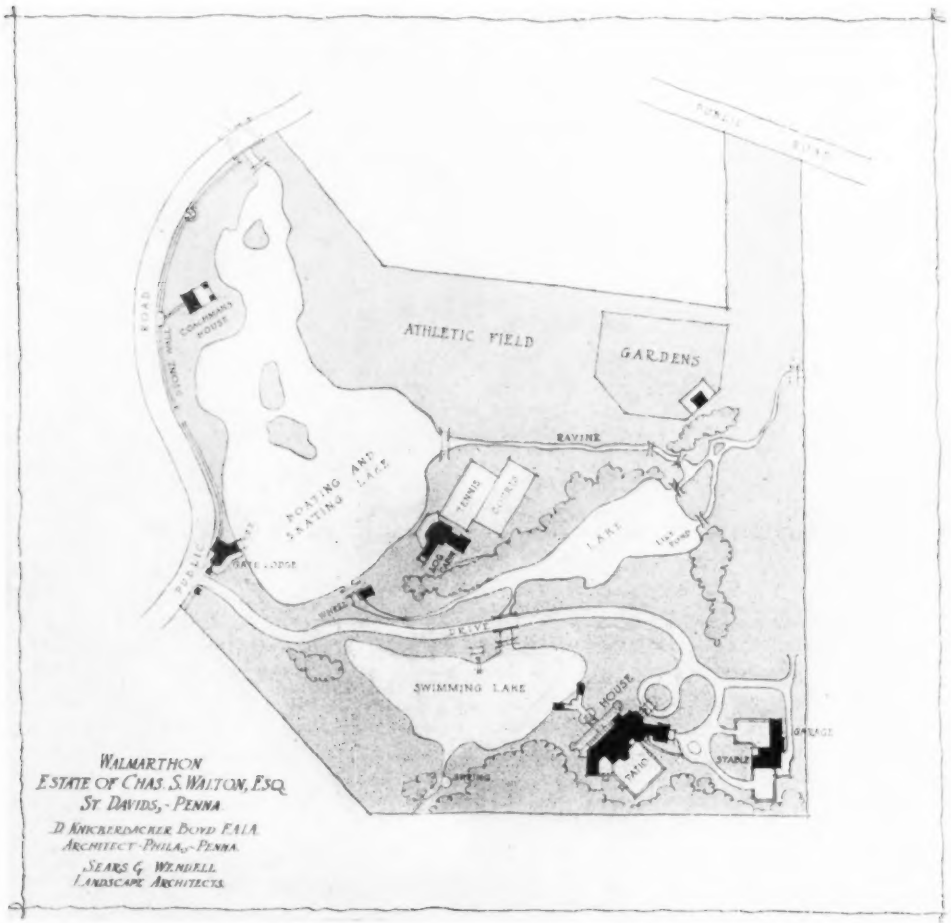
THE residence herewith illustrated was designed by D. Knickerbacker Boyd for Charles S. Walton, and is situated at St. Davids, a suburb of Philadelphia. The estate is on a hillside and the land is terraced from the house down to the edge of a lake. The building, with its tower, tiled roofs, and quaint chimneys, inspired by the old Mission style of California, and with its Sicilian pergolas and gardens, is admirably suited to the sloping site, the hills and the beautiful stretches of water.

The gate lodge, with its connecting walls and massive stone posts at either side of the drive, forms an impressive entrance to an unusual estate. The native roadside trees have been preserved and the lodge has been set back for repose. Through arches in the walls vistas can be had past the lodge, across the lakes and well kept lawns, to the log cabin; and through the gate posts the house is seen rising beyond the winding drive.

The gate lodge is perhaps more typical of the Mission style than the house itself because, in its case, the necessity did not exist for large window openings. In addition to the usual functions of a lodge, this one, being on the water's edge, serves also as a boat house.

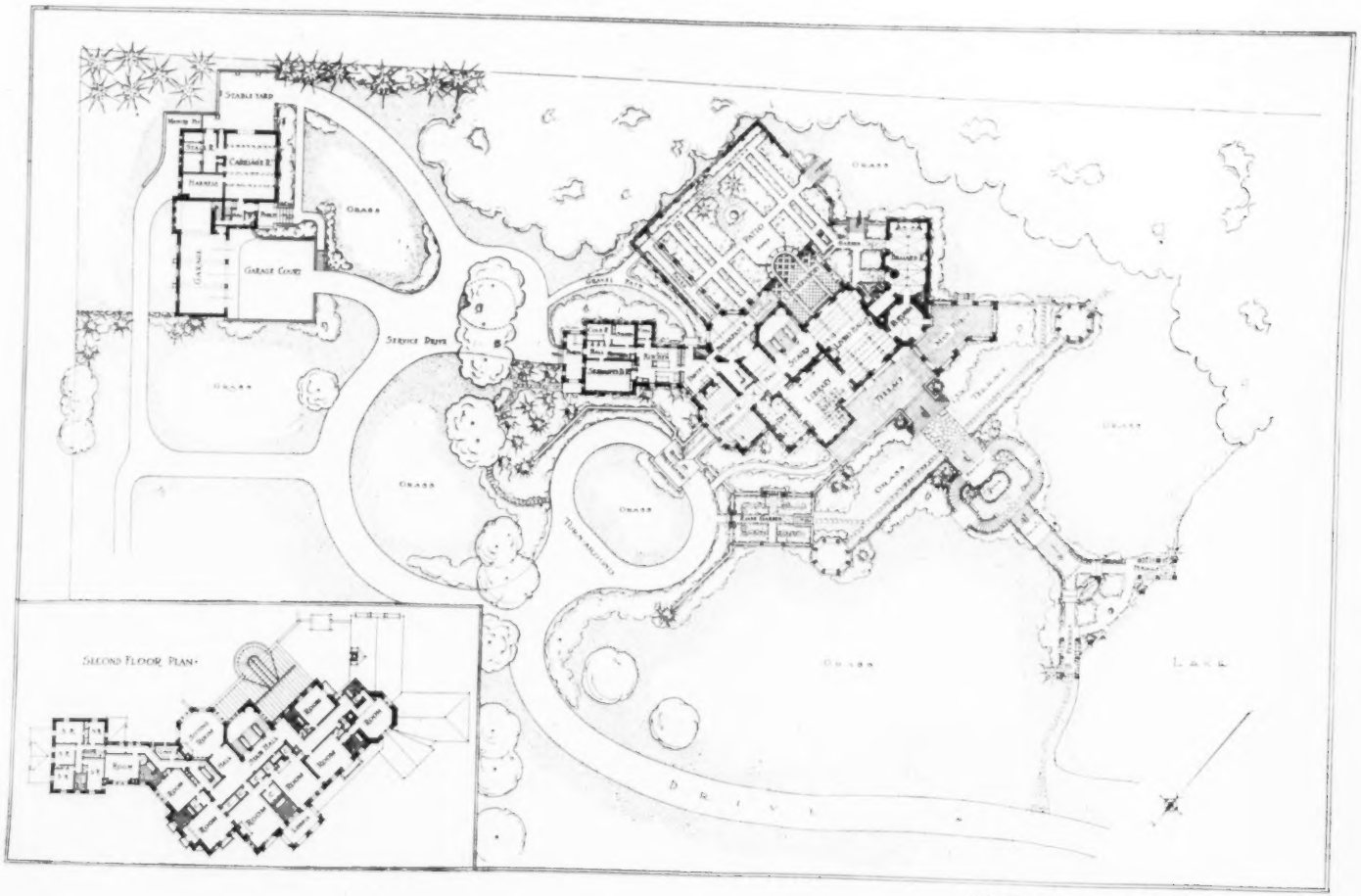
From the gate lodge the driveway skirts the boating and skating lake, the outlet of which is just alongside the drive. Here there is a waterfall, of considerable height, with masonry abutments, snuggled against which is a little pump house with a quaint oak water wheel, which pumps water into a tank in the stone tower of the garage for the fountains in the patio, in the breakfast room and on the front terrace. The drive then crosses a stone bridge, beside which is a spillway from a second waterfall, the overflow of the second or swimming lake. As the drive winds on by the third lake and rises, the garage comes into view, with its sturdy water tower above the walls of the automobile court, well massed in clear and effective outline against the background of trees.

As the rise to the house is further ascended the vistas open. These have been skillfully handled, the foreground melting into middleground and background in a very pleasing manner. The foreground has the character of an engraving, a clear, distinct and rather sharp effect, as in all well designed landscapes. The background, on the other hand, has the character of a mezzotint. Much of the planting is indigenous, and the remainder has every appearance of being so, the semblance of tropical effects having been obtained by the skillful use of hardy growths keeping the tone values well worked out.



Another turn and the drive enters the forecourt, which is exceedingly well planted in connection with its surrounding stone walls. Here the masonry is a background for the foliage where the service wing of the house juts out; on the other side of the court is a remarkable rose garden, through which access is had to the broad open terrace across the front of the house.

This description applies to the approach by the drive, from which the entrance to the house is on the lower or basement level. Another, and even more entrancing, approach is by means of stepping stones, paved pergolas and cement-dashed broad stairs which take one past pools, vine-covered walls, flowered beds and borders to the upper levels of the terrace stretching across the house, join-


STABLE YARD
CARRIAGE
HARNESS
GARAGE
GARAGE COURT
GRASS
SERVICE PATH
GRASS
GRASS
GRASS

ing the rose garden below the tile and brick porches. Here the visitor on foot has access to the first or living story of the house.

For one to appreciate its full artistic value, it is necessary to see this place. The color and texture of the stone, the varied red of the tile roofs, and the ever-changing verdure and bloom of trees and shrubbery all lend greatly to its charm, as should be the case with a building of this kind.

The exterior of the Walton house logically expresses the interior arrangement, carrying out the French idea of the requirements of an elevation. The predominating motive, or center of interest, emphasizes the plan. The projection forming an alcove from the library on the first floor, with a loggia from two sleeping rooms above, is in close connection with the main hall and stair hall. This portion of the house affords the finest views of the grounds, while vistas of the splendid interiors also open up from here. One may look through the main hall or music room and beyond into the rotunda. Toward the rear of the house, without changing position, one may see across the small hall which leads from the stair hall, past the breakfast room, into the garden adjoining the patio. These long vistas are interesting evidences of good planning.

The general mass of the house is terminated at one end by a tower, which, harmoniously proportioned, is one of the most important single elements of the whole scheme. A building of this type without a tower would be out of character quite as much as a French Gothic cathedral without buttresses and vaults. From a distance the tower is a most effective feature, logically placed and in good scale, carefully studied for effect at any angle. At the opposite end of the house, in a receding wing, are the kitchens and servants' quarters, forming the necessary termination for the residence, which is most unusual for one in the country in that the main entrance is on a lower level than the living floor.

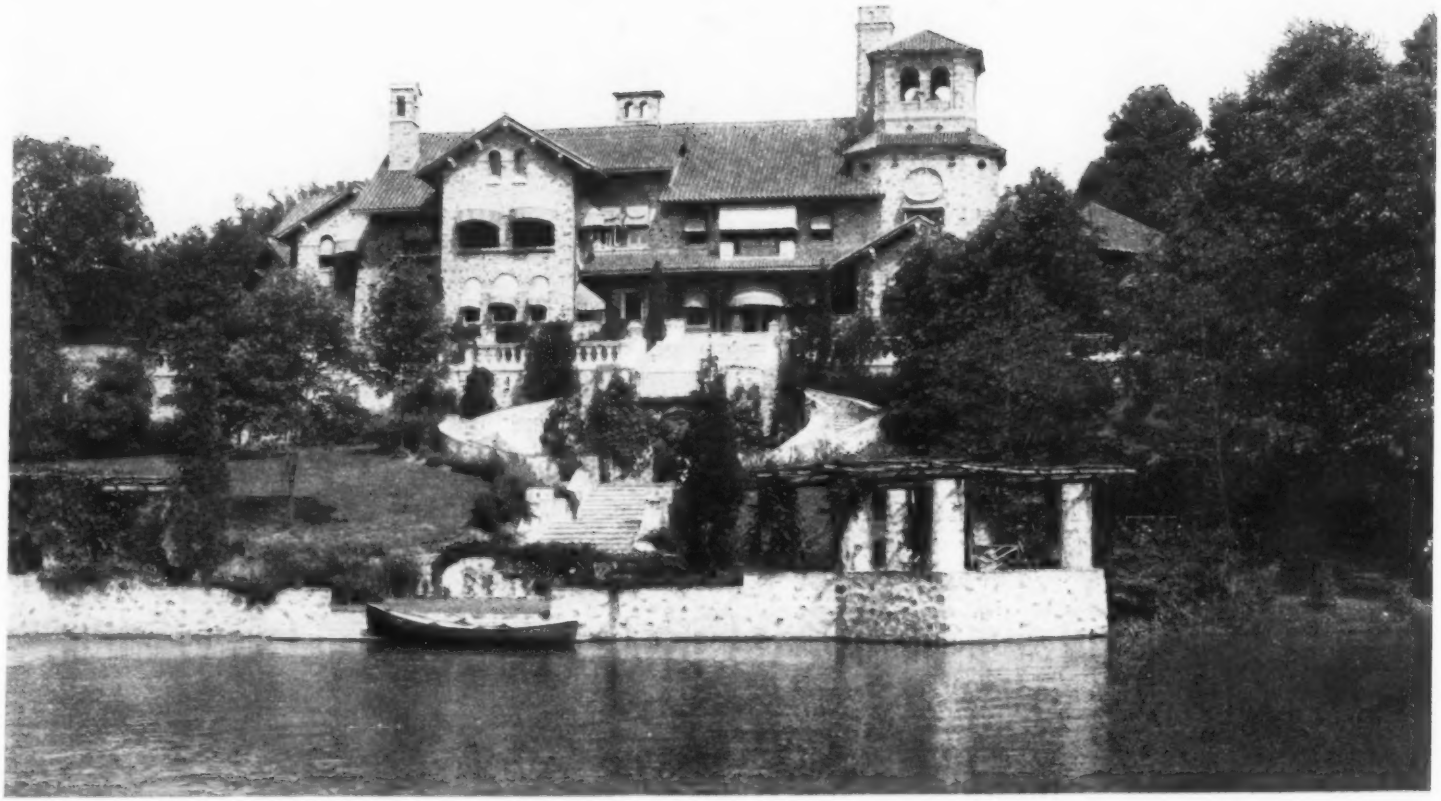
The relation of the roof surfaces to the side walls is well thought out, an evidence of which is the introduction on the front elevation of a hood reminiscent of an arena awning with square-cut sloping supports. This serves not only as a protection to the two large doors, but brings the roof color down to bisect the stone surface and gives a horizontal dividing line producing an effect of lowness. The color of the tile roof is a rare combination of reds, browns and occasional blacks, forming a pleasing, not too decided, contrast with the stone work. The latter also is interesting in tone and full of character. The carefully placed and proportioned chimneys are in keeping with the Spanish character of the entire design. Wrought iron balconies here and there, depending for effect upon proportion and scale, help to echo the Spanish feeling.

In adapting a Mission design to the climate of the North the architect found it necessary to alter the scale of the windows. One of the characteristics of this style is its small openings, leaving large expanses of wall surface.

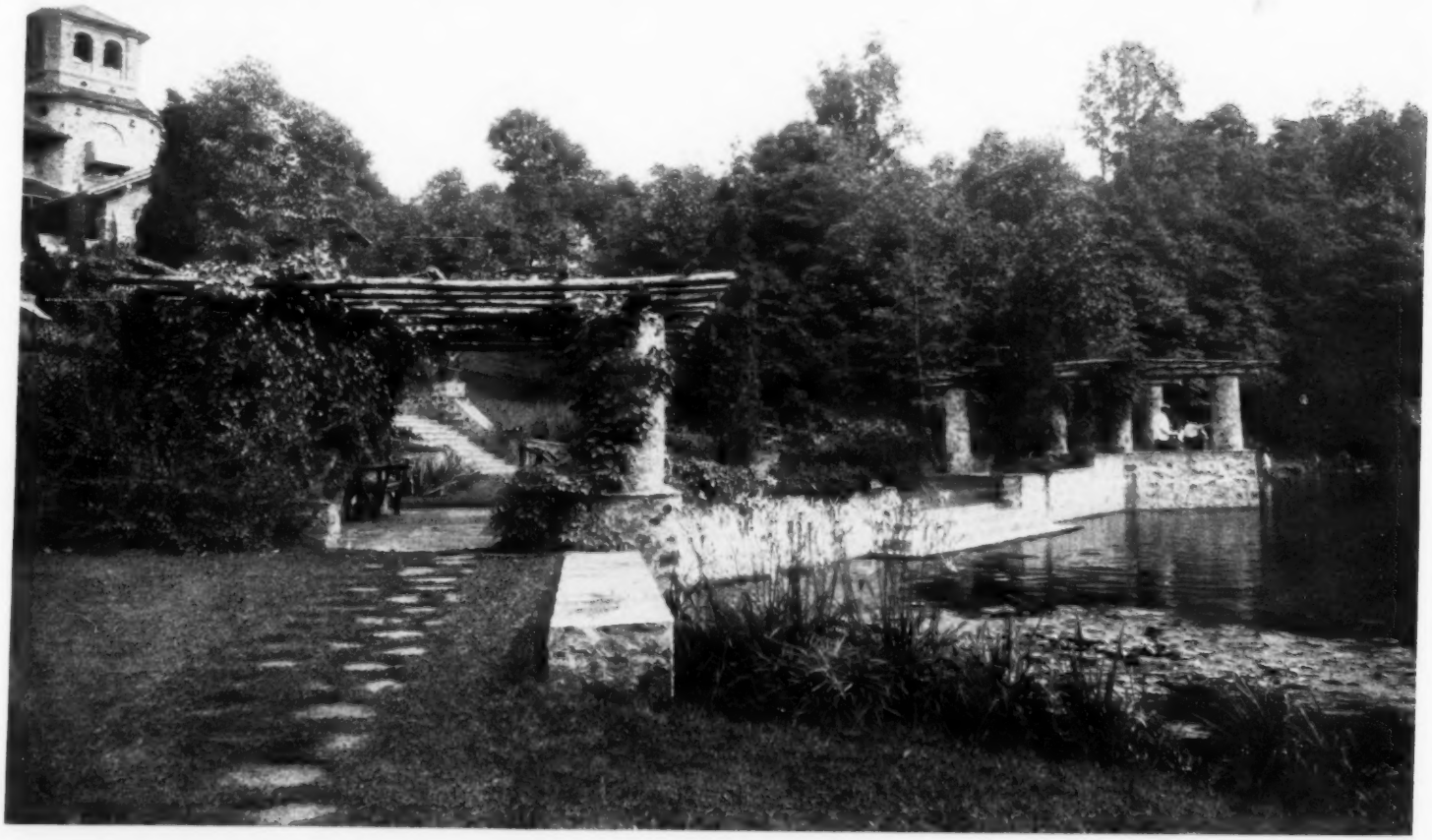
Largeness of scale characterized the palaces and churches of the Renaissance in Spain, from which the Missions were inspired. However, in our grayer and darker atmosphere, it is essential that abundant light and air be supplied. It was mainly because of its great windows that Gothic architecture could never be really accepted in the southern countries which so cordially accepted the Renaissance; the large window expanses of the buildings of Northern Europe were unsuited to the bright sunshine of Spain and Italy. The windows of the Walton residence are larger than a strict adherance to style would have admitted. They do not, however, seriously impair the effect of repose so characteristic of the large, well-balanced Mission wall surfaces. The architect who can do without useless details and make his architecture alone count, as is necessary in this style, has accomplished a very difficult task and successfully lived up to the principles of the best kind of design.

The tone value of the place is quite as attractive as is its architectural value. The stonework is a rich gray, varying to almost a yellowish-brown in places. This warm colored stone, full of interest

VIEW FROM DRIVE -- RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA. D. KNICKERBACKER BOYD, ARCHITECT.



VIEW FROM LAKE—RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA. D. KNICKERBACKER BOYD, ARCHITECT.



PERGOLAS AND LAKE—ESTATE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA. D. KNICKERBACKER BOYD, ARCHITECT.

VIEW FROM PERGOLA AT LAKE RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA. D. KNICKERBACKER BOYD, ARCHITECT.

PORCH AND BILLIARD ROOM WING—RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA. D. KNICKERBACKER BOYD, ARCHITECT.

SERVICE END, LOOKING INTO PORTE-COCHERE—RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA. D. KNICKERBACKER BOYD, ARCHITECT.

VIEW ACROSS SUNKEN GARDEN—RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA. D. KNICKERBACKER BOYD, ARCHITECT.

DINING ROOM BAY AND PORTE-COCHERE—RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA.
D. Knickerbacker Boyd, Architect.

BILLIARD ROOM WING—RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA.
D. Knickerbacker Boyd, Architect.

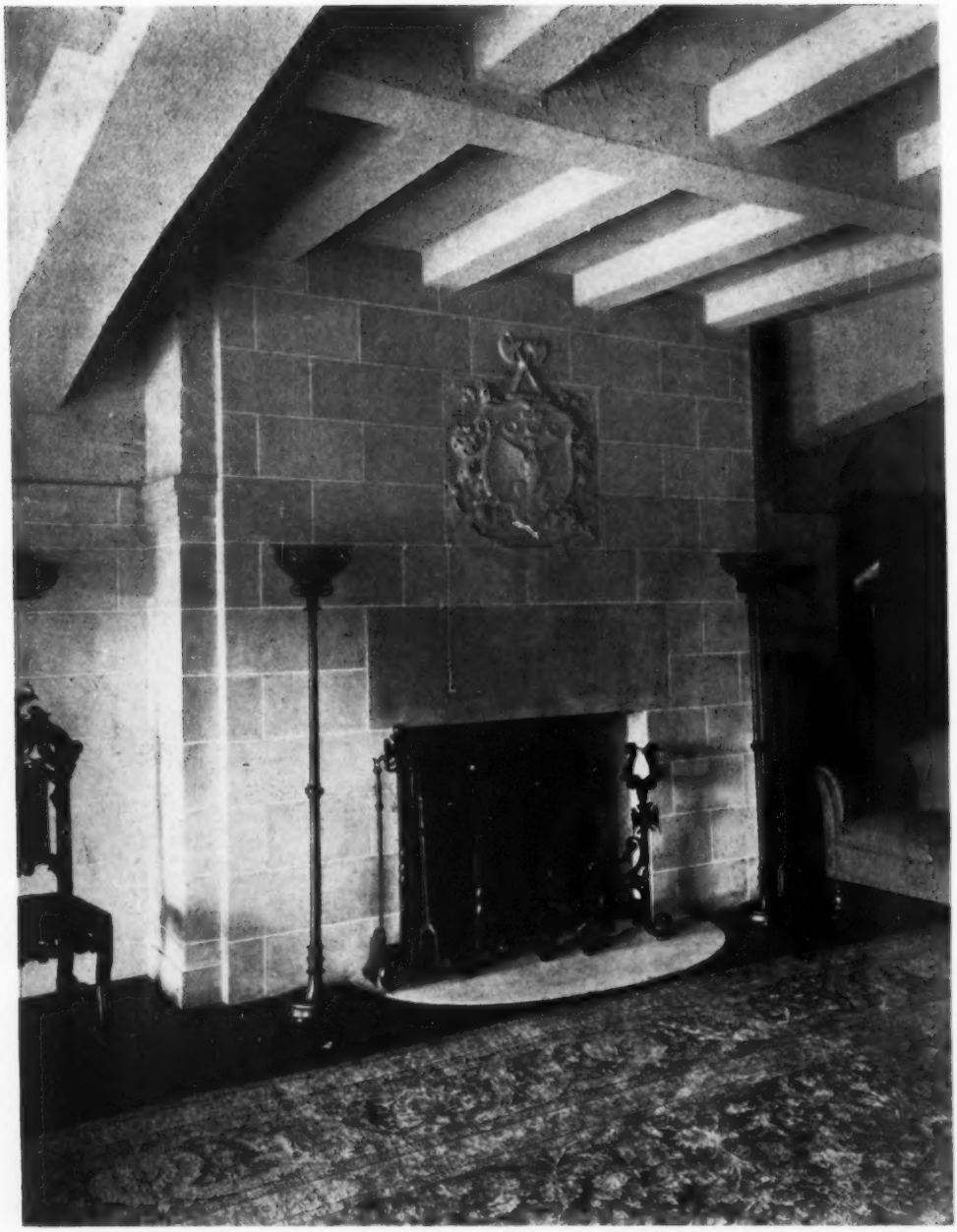
LOOKING ACROSS PATIO—RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA.
D. Knickerbacker Boyd, Architect.

LOOKING PAST CONSERVATORY INTO PATIO FROM SUNKEN GARDEN—RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA.
D. Knickerbacker Boyd, Architect.

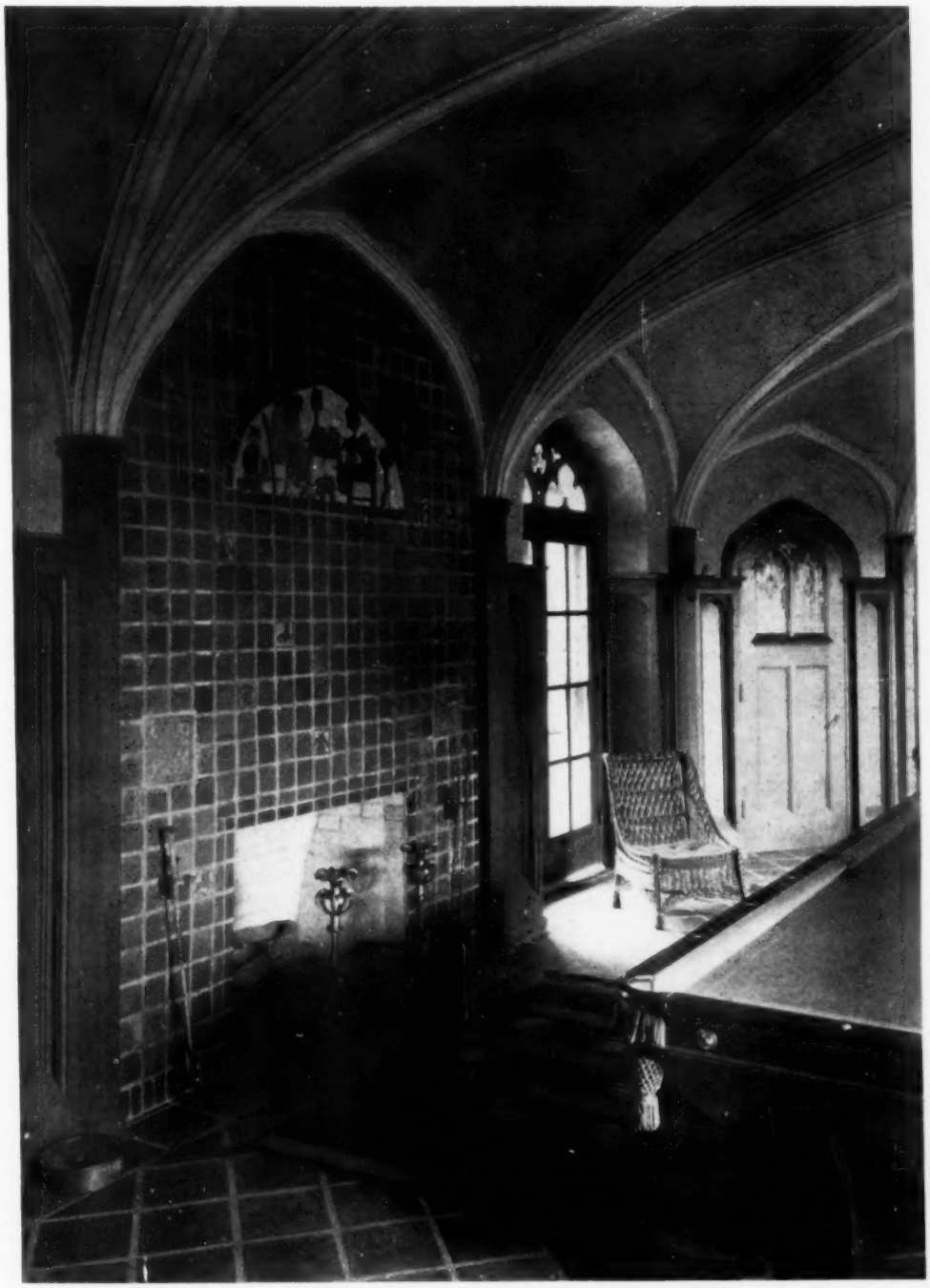
VIEW IN PATIO—RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA.
D. Knickerbacker Boyd, Architect.

LOOKING INTO PATIO—RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA.
D. Knickerbacker Boyd, Architect.

DETAIL IN MAIN HALL—RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA. D. KNICKERBACKER BOYD, ARCHITECT.



MANTEL IN MAIN HALL—RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA. D. KNICKERBACKER BOYD, ARCHITECT.



SIDE OF BILLIARD ROOM—RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA. D. KNICKERBACKER BOYD, ARCHITECT.

and adding immensely to the character of the walls, has a striking appearance in strong sunlight. Laid up with cement and gravel mortar, resembling adobe, and slushed on, it makes a most attractive exterior treatment. Local stone, thoroughly indigenous, is used and the texture so carefully and yet so easily secured produces the appearance of some rare old building which, under the weathering and wear of centuries, has exposed its structural materials to the sunlight. The bracketed overhangs or eaves, such as were used in the older buildings, cast deep shadows on the warm stonework; especially in the patio are good shadow effects obtained, due to careful designing. After all, in an exterior composition, the proportions and accents depend largely on shadow effects, and too much attention cannot be paid in this direction. The silhouette of the entire mass, with the chimneys, tower and broken roof lines rising from tiers of longer terraces below, is most interesting and picturesque. The effectiveness of a building of this kind depends, of course, largely on color and color combinations; the rich dense foliage about the place, joined to the exquisite tone of the building itself, is very charming. The building, with all its appurtenances, has an air of solidity and beauty when seen from any viewpoint.

Although the plan is unsymmetrical and informal, in accord with the picturesque character so desirous in the type, it yet preserves its unity and is spacious and open to a degree, combining within its parts as a livable feature the patio, which is partly sunk into the ground, and the gardens and terraces which surround the rooms. A plan, first of all, must be logical. The plan of this house is comprehensive, with a good circulation; it suits the needs of the family, and in artistic arrangement the ensemble is well carried out. Broad, muntined casements lead from most of the living rooms to the garden or terrace levels. Pleasing vistas open from various points. One of them is from the sunken garden, through the entire length of the house and out from a wide window in the dining room across broad acres to the hills beyond.

The patio, which is typically Spanish, is one of the most pleasing and fitting elements in the whole plan. It is accessible from every room on its side of the house, offering a delightful combination of privacy and openness. In a house of this type, the Spanish revision of the Roman atrium and the Italian cortile contains also traces of Moorish influence. The arrangement of the plants and flower beds, which are rich in verdure and brilliant color during the varying seasons, the simple and gracefully arched enclosing walls, the central fountain, the benches and paved walks form an attractive adjunct to the house. The fountain and benches, of rich mosaics, are fine examples of craftsmanship, reminiscent of Moorish and Arabian prototypes. The banked foliage around the patio is a fitting background to such a place.

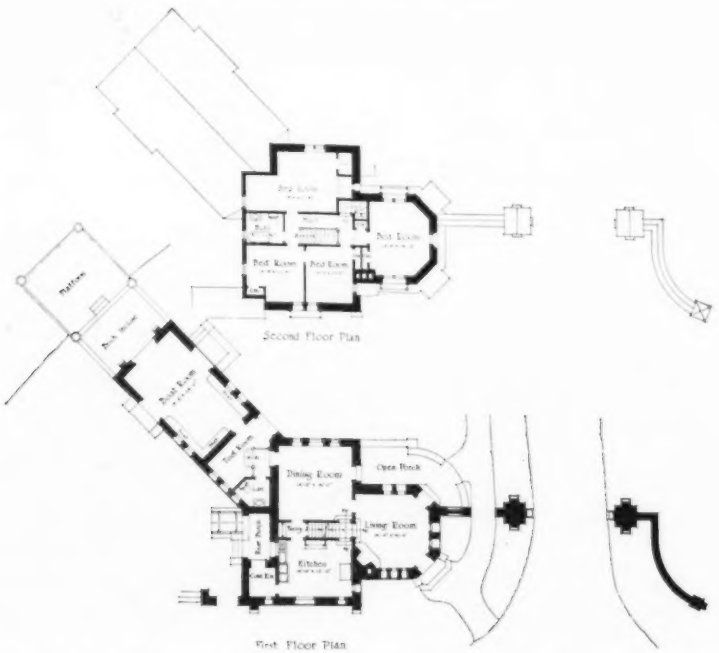
The breakfast room, which opens off the patio, is, in a sense, the family entrance to the first story of the house, as it is on the level of the driveway at the service end. It has that very desirable quality of fresh and inspiring atmosphere, to which the vista largely contributes. The room itself is latticed to bring the outdoors within, as it were.

It is in the main hall that the simplicity, logical appearance of construction, beauty of proportion and color so expressive of the exterior are best executed. The heavy adobe coated beams, with their varied shades and rough hand-wrought look, the floor of wide teak boards, fastened with wooden pegs, and the jointed stone walls give the unmistakable Mission character. The furniture consists of rare old chests and chairs brought from Spain, which accord with the wall treatment, punctuated on one side by the stone fireplace and on the other by three arches left for future organ installation, but hung meanwhile with tapestry.

The grand stairway, with its marble work and iron balustrade, has been well executed in the quiet old Spanish style; and is again typical, for Spain

ONE END OF THE DINING ROOM—RESIDENCE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA. D. KNICKERBACKER BOYD, ARCHITECT.

GATE LODGE—ESTATE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA.
D. Knickerbacker Boyd, Architect.

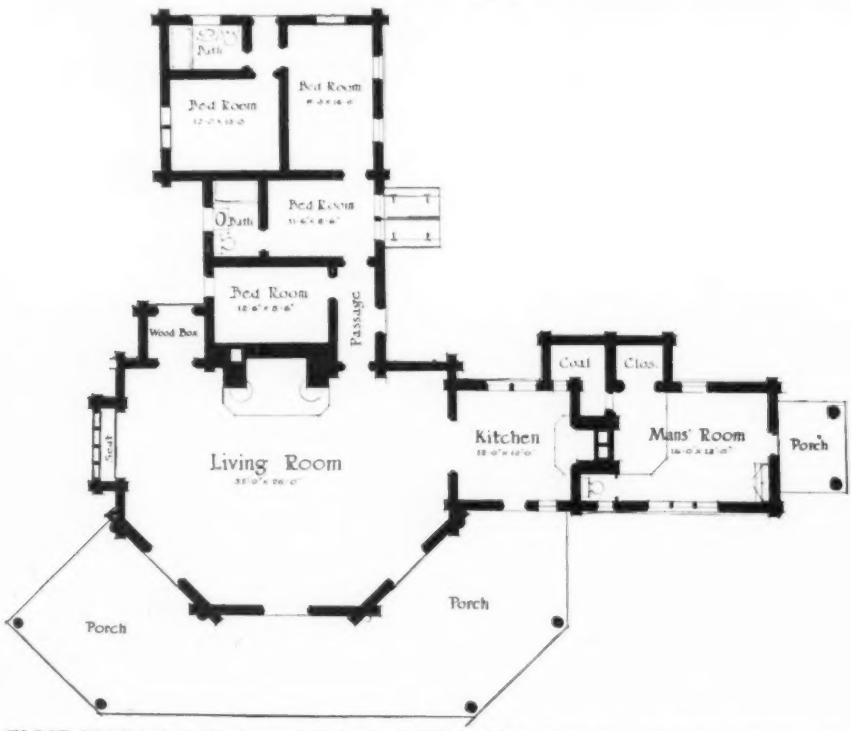


FLOOR PLANS OF GATE LODGE—ESTATE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA.
D. Knickerbacker Boyd, Architect.

GARAGE—ESTATE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA.
D. Knickerbacker Boyd, Architect.

WATER WHEEL AND PUMP HOUSE—ESTATE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA.
D. Knickerbacker Boyd, Architect.

LOG CABIN—ESTATE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA.
D. Knickerbacker Boyd, Architect.



FLOOR PLAN OF LOG CABIN—ESTATE OF CHARLES S. WALTON, ESQ., ST. DAVIDS, PA.
D. Knickerbacker Boyd, Architect.

has always been famous for the products of her metal workers. The main stairway leads down to the stair hall below, adjacent to the entrance vestibule. A long stone-arched entrance corridor on this lower level, from the vestibule to the stair hall, has been left in severe and unfinished simplicity.

The Spanish feeling has been strictly carried out in the patio, entrances, halls and stairway. These features were invariably the most important in the old Spanish country palaces and well merited the architect's special attention and adherence to style.

The use of English Gothic in the library, rotunda, den and billiard room, and the treatment of the dining room and breakfast room, are the only innovations on the first floor. As Spanish Renaissance was greatly influenced by the Gothic, the combination of the two styles is not at all unpleasing and blends remarkably well.

The "morning room" or up-stairs living room, over the breakfast room, is generously open, being lighted on four sides by windows. Large, well arranged closets and baths are features of this floor. All the necessary conveniences for the modern home of spacious dimensions, including a sewing room with large closets and drawer space, a cedar room for the storage of furs, a drying room, storage rooms, curtain rooms, etc., are provided, principally in the third story.

The importance of landscape art is often overlooked, although as much consideration should be given to the setting as to the design of a building. During the Renaissance in Italy, each villa generally comprised a dwelling, a casino or amusement house, and many minor buildings, summer houses, arcades, etc., designed in extensive grounds, laid out with terraces, cascades and shaded drives. In the case of the Walton residence, the landscape work, designed by Sears and Wendell, has been used as an adjunct to architecture; it aids in scale, proportion, unity, accent and character. The estate of forty-two acres was practically waste land before the project was started. Some of the principal features of the landscape treatment are a swimming lake, a skating lake, and a small lake with rustic bridges; large well-kept lawns, drives and gardens. The patio forms a natural part of the landscape, as do the terraces, approaches, wooded portions and shaded walks.

A careful arrangement of the landscape shields the log cabin from the house, precluding comparison of the two as to style and finish. The cabin fills the place of the Italian casino or amusement house. It is built of winter cut chestnut-oak logs from Virginia. The roof is of bark of these trees and the chimney stones are of worm-eaten flint from a nearby quarry. Inside are provided bedrooms for guests, and showers for swimmers, skaters and tennis players. Quarters are also provided for the caretaker who superintends the lakes, which are open to the use of the neighbors for swimming and skating. The lakes had been used by the neighbors for years, and Mr. Walton, instead of depriving them of their customary recreation, has provided shower baths and other conveniences. A fire is kept burning in winter in a huge fireplace. Tennis courts are in immediate connection with the log cabin; these, with the large garden opposite the ravine shown on the block plan, together with the broad lawn spaces, wooded areas and the lakes, make up one of the most completely satisfactory country estates to be found within so short a distance of almost any of our large cities.

During the recent advance in the quality of American architecture, the possibilities of French, Italian, or English Renaissance, have been almost exhausted, leaving a new solution for the country house type to be evolved. Combinations of all sorts have been attempted, but there is a feeling that there is a style somewhere that will produce a Renaissance country house with an informal plan. The architects of the West Coast have used the Mission design with charming effect, for there the climate is favorable. Mr. Boyd has brought the Mission style to the East and demonstrated that this early American mode of architecture is adaptable to our rougher climate.

DETAIL OF LOGGIA—PARRISH MUSEUM, SOUTHAMPTON, L. I. GROSVENOR ATTERBURY, ARCHITECT.

The PARRISH MVSEVM

Southampton, Long Island

Grosvenor Atterbury, Architect

By Charles C May

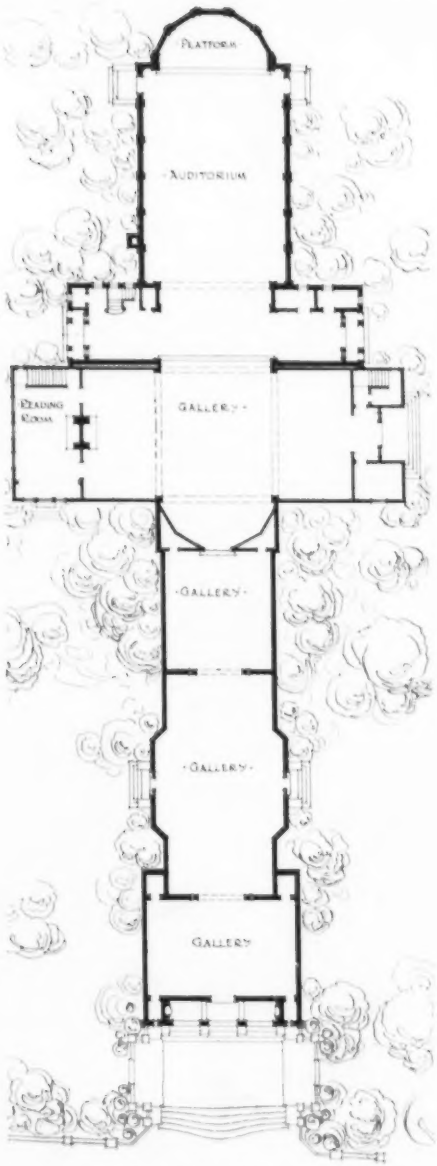
WE are told that Toledo leads the larger cities of the United States in its proportion of population represented in attendance at its principal art museum. The percentage given is fifty-seven. Boston, the city most of us would have picked as leader, is a moderately good second with forty-eight per cent., while Chicago is well up in the list. New York, although its attendance is tremendous in actual figures, is far down the scale, with its eighteen per cent. who file yearly through the turnstiles at the Metropolitan.

In view of these figures, it is interesting to turn to an art gallery in a village—Southampton still clings rather pridefully to the title "village"—and to consider the Parrish Museum. The attendance record for 1914 is startling—no fewer than six thousand persons, and that during a season only four months long. More remarkable is the circumstance that this represents an attendance considerably in excess of one hundred per cent. of the maximum summer population of Southampton.

These are the facts; the reasons for them are doubtless many and inextricably interwoven. We may safely select a few, however, and say that the public response to Mr. Parrish's invitation is due somewhat to the unusual care with which the collection has been brought together, balanced, and augmented; to the unusually generous and open treatment accorded to the visitor; to the unusual setting in which the collection is placed (of which more in detail later), and to the unusual setting of the building itself within its lovely garden.

The building, like the collection within it, is a growth. The first unit was opened some seventeen years ago, a second followed about six years later, and the new wing, by far the most interesting architecturally, was completed in 1913. The whole enterprise is a splendid example of a collection privately owned and maintained, but dedicated to the pleasure and benefit of the public; for both galleries and garden are thrown open to villager and stranger as well. Not only so, but often, in the auditorium which occupies the wing furthest from the street, the public are invited to lectures on art subjects, as well as to organ recitals by way of variety.

The building is the work of Grosvenor Atterbury of New York and, we speak of the latest wing, has attracted favorable comment both in actuality and as photographed for various exhibitions. In plan, in exterior treatment and in detail the building is simplicity itself. It relies for its effect not upon picturesqueness of form or features, but upon the grouping of large masses, bold contrasts of shadow, and texture of expansive wall surfaces. This latter quality, care for and study of surface textures, has been increasingly important in Mr. Atterbury's work of the last few years. In this case he has made use of the bulged, overburnt brick known as "lammie" brick, a by-product formerly scorned by architects, rejected by builders and scrapped by manufacturers. For six or eight years Mr. Atterbury has been trying out its possibilities, and has recently made wide use of it in his work at Forest Hills. The bricks are so gnarled and twisted that they must perforce be laid up on edge, as in the Parrish Museum, and usually as a veneer over a shell of terra cotta blocks. It is interesting to note that with the sudden opening of a market, this brick, from being a waste product of no value, has become a staple article, for which the demand has recently created a decided scarcity. The lammie is here used in conjunction with common brick, which has been promoted to act as trimmings; that is to say, as



FLOOR PLAN—PARRISH MUSEUM, SOUTHAMPTON, L. I.
Grosvenor Atterbury, Architect.

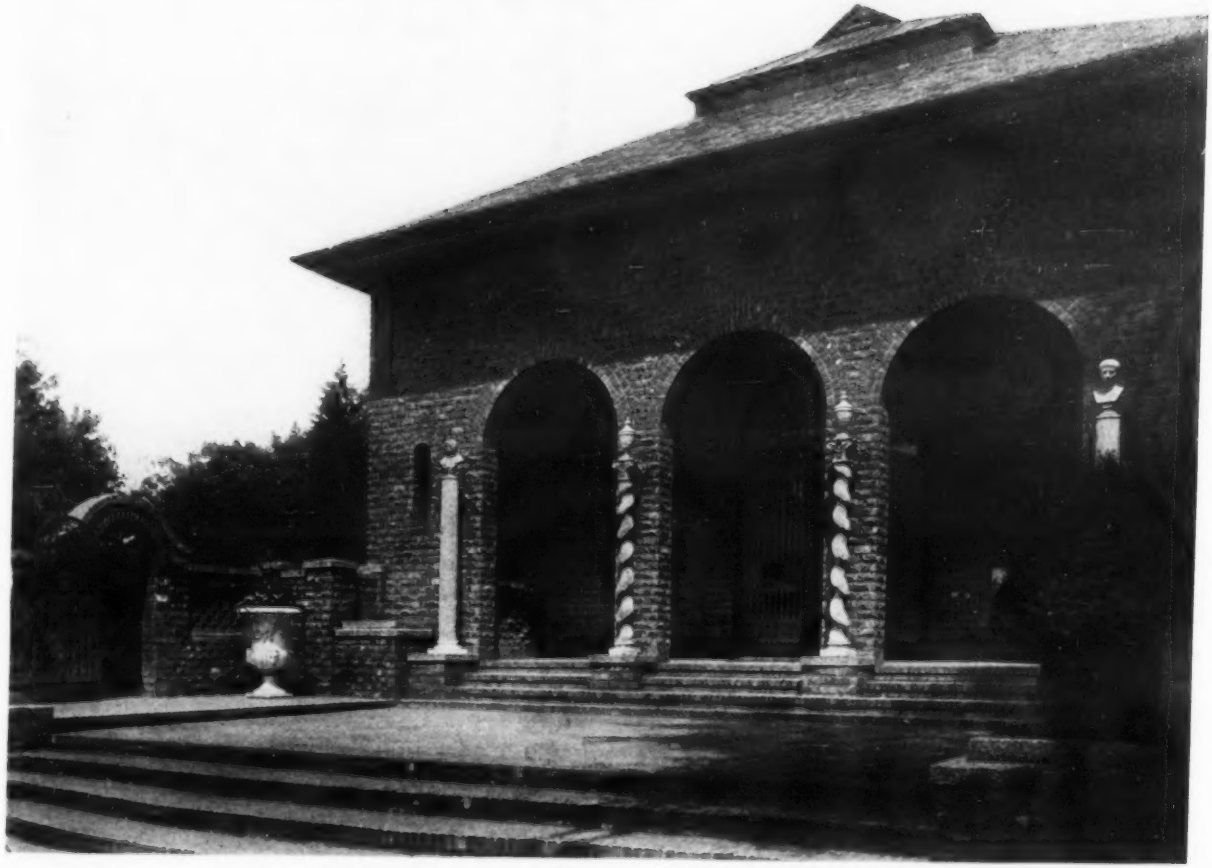
belt courses, caps, imposts, archivolts and the like. The two also appear in direct combination in the panels and their frames, where they occur within and over the loggia. In all cases, the bricks are laid up in a black mortar of non-fading composition.

Since the building presents its narrow front toward the street, the ancient Job's Lane, it was obviously necessary to gain breadth by spreading the architectural treatment across the whole width of the property. This has been accomplished by means of an iron fence topping a low wall and divided into panels by piers, both of the same brick that is used in the building. These flanking walls afford pleasant vistas into the garden and lead one's attention quite naturally up to the chief feature of the building, the fore court and loggia.

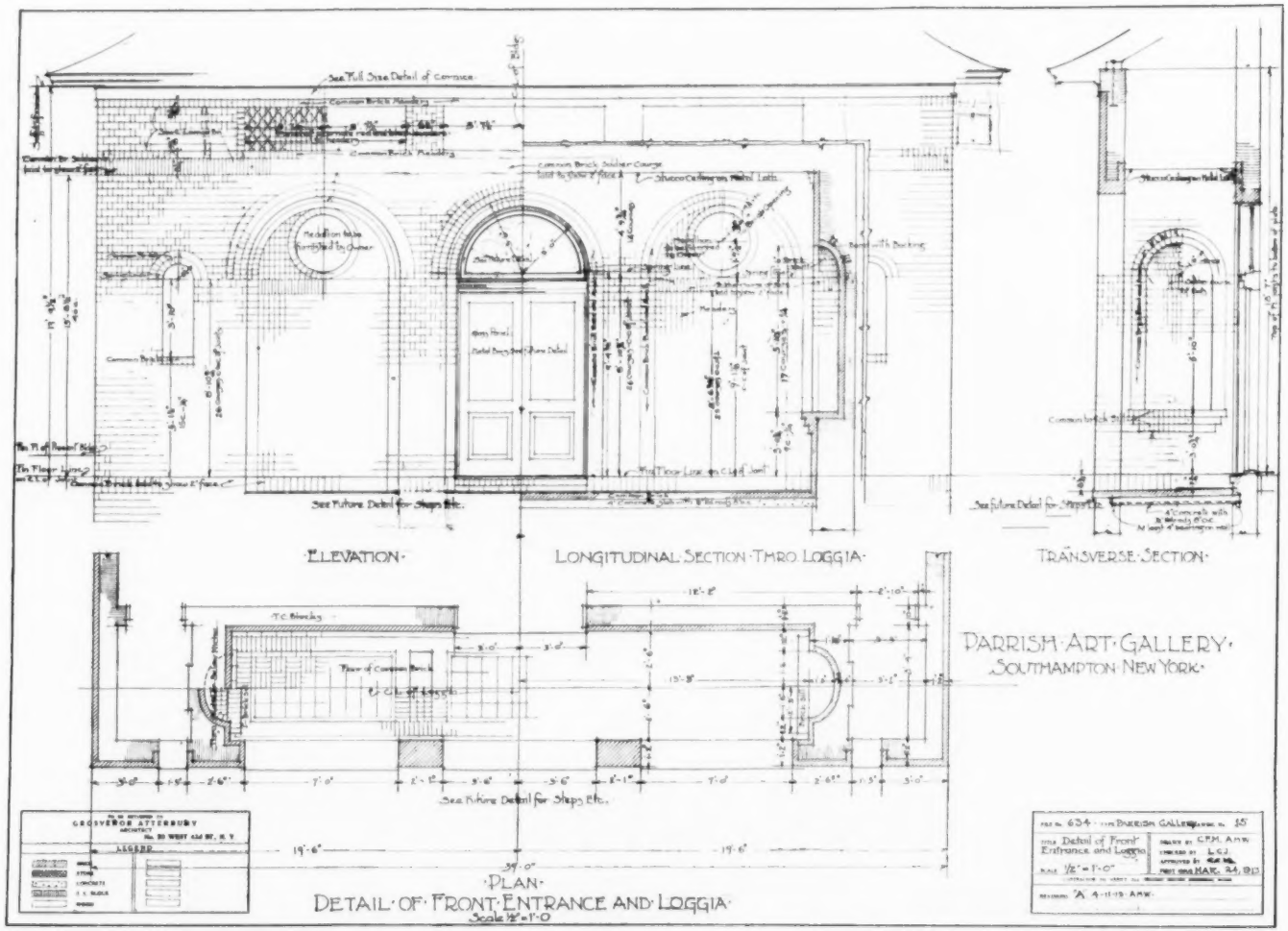
With the other wall surfaces unbroken to the point of severity, it was logical to concentrate the interest of color and light and shade here, at the main entrance. The focussing of attention begun by the flanking wing walls, stimulated rather than interrupted by the glimpse through the lateral gateways, continued by the color values of the plaques in the side arches and the columns outside, is completed by the exceptionally decorative iron work at the main entrance doors. The whole produces a composition that is both satisfying and climactic. Color plays an important role. The side gates are red, risking the suggestion of a shop coat of paint for the sake of the silhouette against the background of deep green; the panels and plaques in the loggia are full of color reminiscent of the Italian; the lovely warm tones of the columns are emphasized against the brickwork, and the whole is refined and kept from garishness by the gray of the fore court pavement.

It may perhaps be open to question if the employment of the rectangular plaques (the lower ones in the panels) has not the effect of an over-emphasizing of the decorative spotting, of making a shade too obvious the characterization of the building. In the long run, is it not best to minimize the use of any decorative element that suggests a label? In the Foundling Hospital at Florence, the single motive of the bambino, aside from an occasional accent over the doorways, is used as an inherent part of the façade and forms the perfect suggestive characterization for the building. So one ventures the personal

THE PARRISH MUSEUM, SOUTHAMPTON,
L. I. GROSVENOR ATTERBURY, ARCHITECT.



DETAIL OF FORE COURT AND WING WALLS—PARRISH MUSEUM, SOUTHAMPTON, L. I. GROSVENOR ATTERBURY, ARCHITECT.


See Full Size Detail of Cornice
Common Brick Moulding
Common Brick Soldier Course
Stucco Calcimo on Metal Lath
See Future Detail for Steps Etc.
ELEVATION
LONGITUDINAL SECTION THRO LOGGIA
TRANSVERSE SECTION
PARRISH ART GALLERY
SOUTHAMPTON NEW YORK
T.C. Blocking
Floor of Common Brick
See Future Detail for Steps Etc.
GROSVENOR ATTERBURY
LEGEND
PLAN
DETAIL OF FRONT ENTRANCE AND LOGGIA
Scale ½"=1'-0"
Detail of Front Entrance and Loggia
DRAWN BY C.P.M. A.M.W.
CHECKED BY L.G.J.
APPROVED BY
DATE MAR. 24, 1913
SCALE ½"=1'-0"
REVISED "A" 4-11-13 A.M.W.

feeling that in this case the multiplicity of these elements is a loss rather than a gain in the impression created. Taken singly, they are thoroughly charming. When built into their present positions they were monochromes, so that they stand now as examples of the splendid results that can be obtained through the use of color by moderns who have loved and studied the ancients.

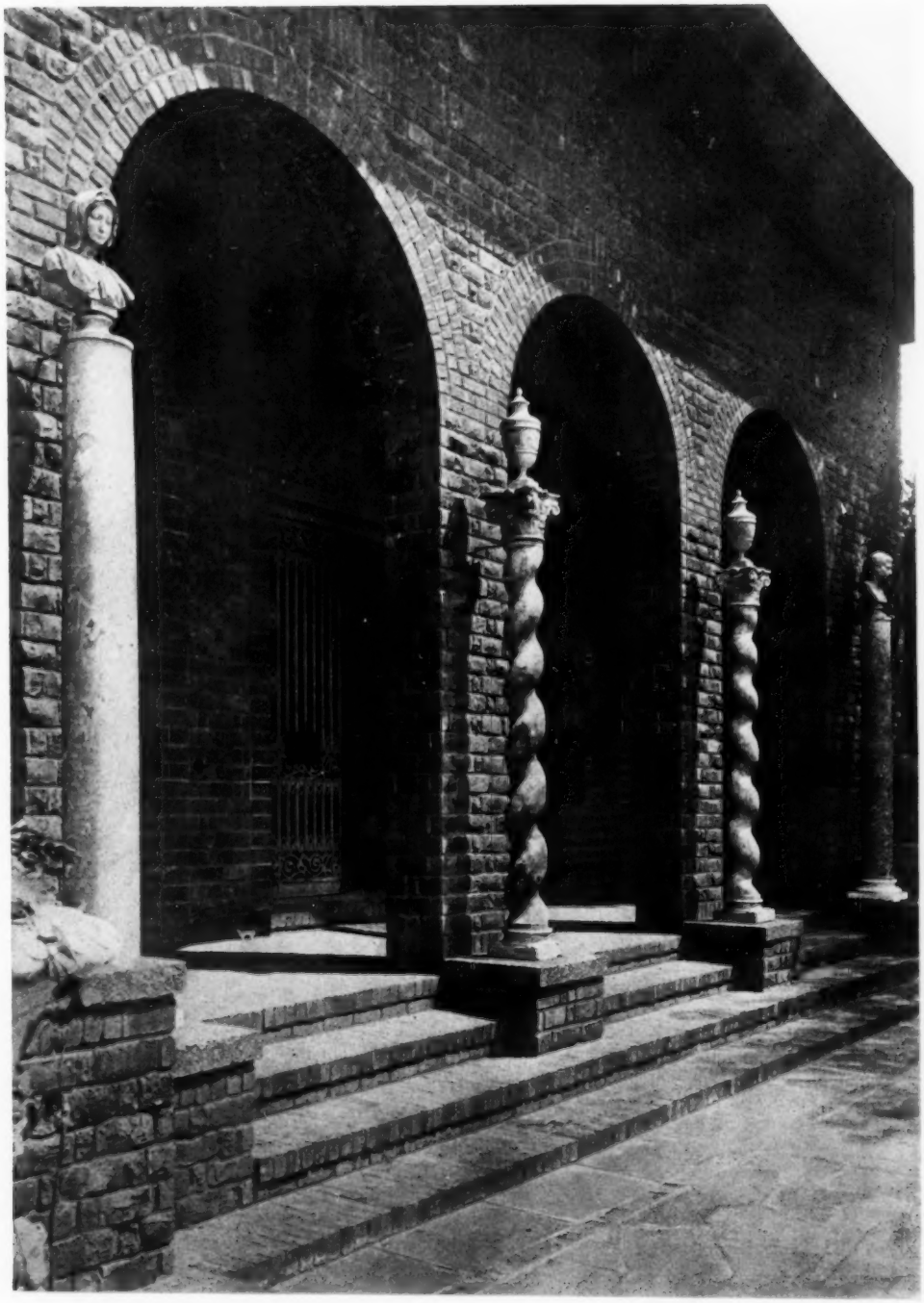
It is perhaps worth noting that Mr. Parrish has considered the impression to be created by the gallery during the hours when it is closed to the public. At night the passerby is attracted by a glow of light through the iron and glass doors to the spot where the single point of illumination is directed upon the full-size cast of the Venus de Milo, which occupies the focal point of the main axis. Seen through the tracery of the doors and in connection with the shadowy outlines of the surrounding sculpture groups, the effect is so well studied as to be perfectly spontaneous.

To the visitor entering from Job's Lane the gallery presents a vista through three consecutive exhibition rooms of differing shapes, the one nearest the street lying normal to the others. These constitute the new wing, which is again normal to the older portions of the gallery at the rear. One receives at once a grateful sense of freedom from supervision or necessity of viewing the collection in prescribed sequence. The single attendant, to be sure, invites registration, but there ends every suggestion of restraint, and one is free to enjoy the collection at leisure and, if there is still time afterward, to wander through the gardens.

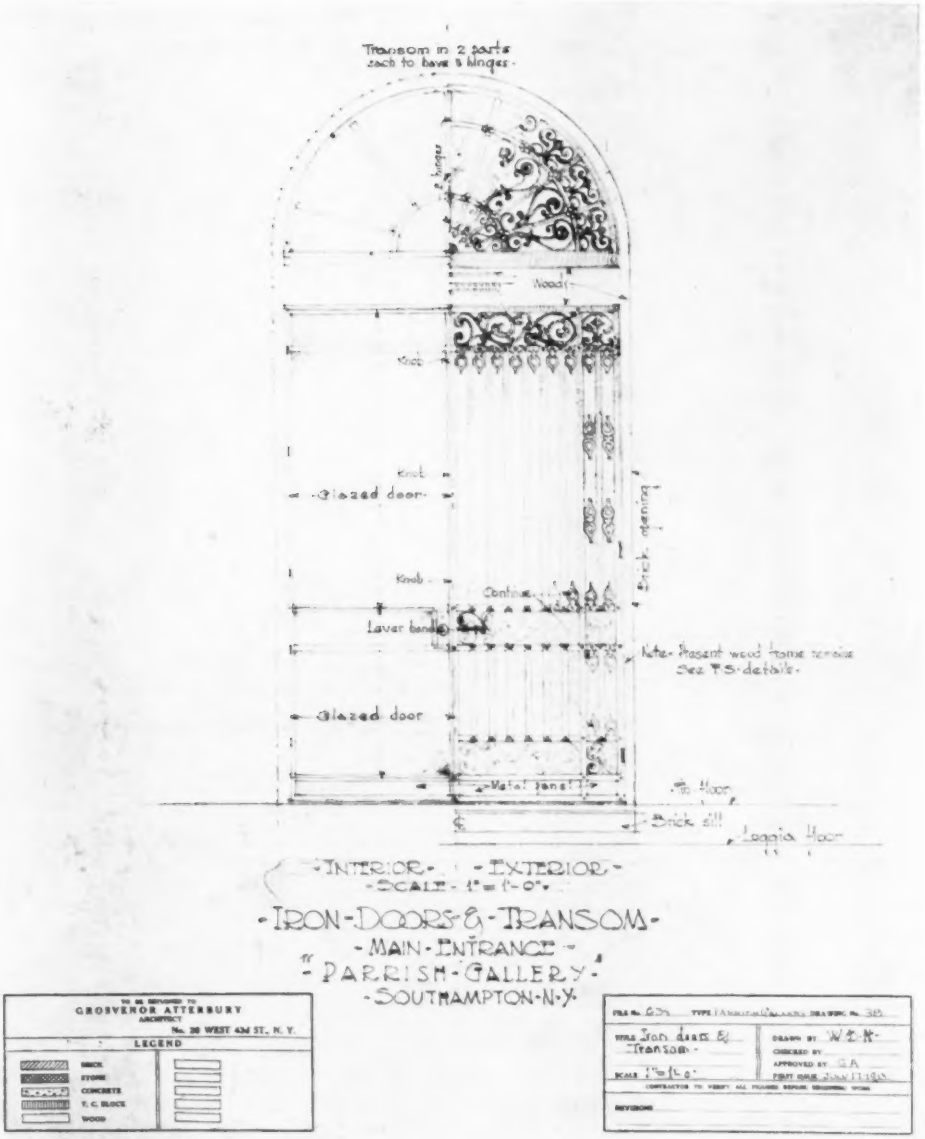
The doors at the sides of the central gallery are glazed, as is that of the main entrance. With these exceptions, the galleries are lighted entirely from overhead. The effect is not, however, the usual one of direct, if not glaring, illumination from concentrated skylight areas; the impression is rather that of a mellow glow over the whole space. It is like a transparent wash of warm tone over a water color, unifying and "pulling together" the composition. The result here is attained by a vaulted glass ceiling in which the glass itself possesses the warmth of tone. It has also sufficient body to diffuse the light so that disturbing shadows and spottiness are quite obviated. The glass is in the form of an elliptical barrel vault, supported by wooden ribs which spring from a simple cornice all around the galleries.

What is true of the natural lighting is equally so of the artificial. All outlets have been placed above the glass and have been arranged with a view to even distribution of units of low intensity, instead of concentration of high-powered clusters. While neither form of lighting, natural or artificial, was referred to an engineer or specialist, and while the omnipresent evil of reflections has not been altogether obviated, these galleries are possessed, by day and by night, of a mellowness of atmosphere that compares very favorably with the lighting of many museums of considerably greater pretensions.

It is an axiom that the architectural surroundings of a collection such as this should never obtrude themselves unduly, should never, in fact, reach the point of competing in interest with the exhibit for which they form merely the setting. And the obvious corollary would forbid the use of any strongly contrasted color schemes or notes of decoration in galleries that are in reality continuations one of another. In the Parrish galleries—of the new wing, that is—the several units are so intimately related, separated, as they are, only by columnar openings which divide without cutting off, that one must feel the wisdom of treating all three galleries alike. The walls are covered with a heavy, deep-toned blue burlap stretched on a board backing, and the color is gratefully cool, after coming in from the brilliant Southampton sunlight. The floors, being covered with a heavy, solid-colored linoleum of a neutral tone, do not obtrude themselves into the general color treatment. The burlap wall surfaces are framed by woodwork which, while painted, still has been given sufficient surface texture to support that of the burlap. The result was, of course, obtained by stippling a glazing coat of a deep shade over the



LOGGIA—PARRISH MUSEUM, SOUTHAMPTON, L. I. GROSVENOR ATTERBURY, ARCHITECT.

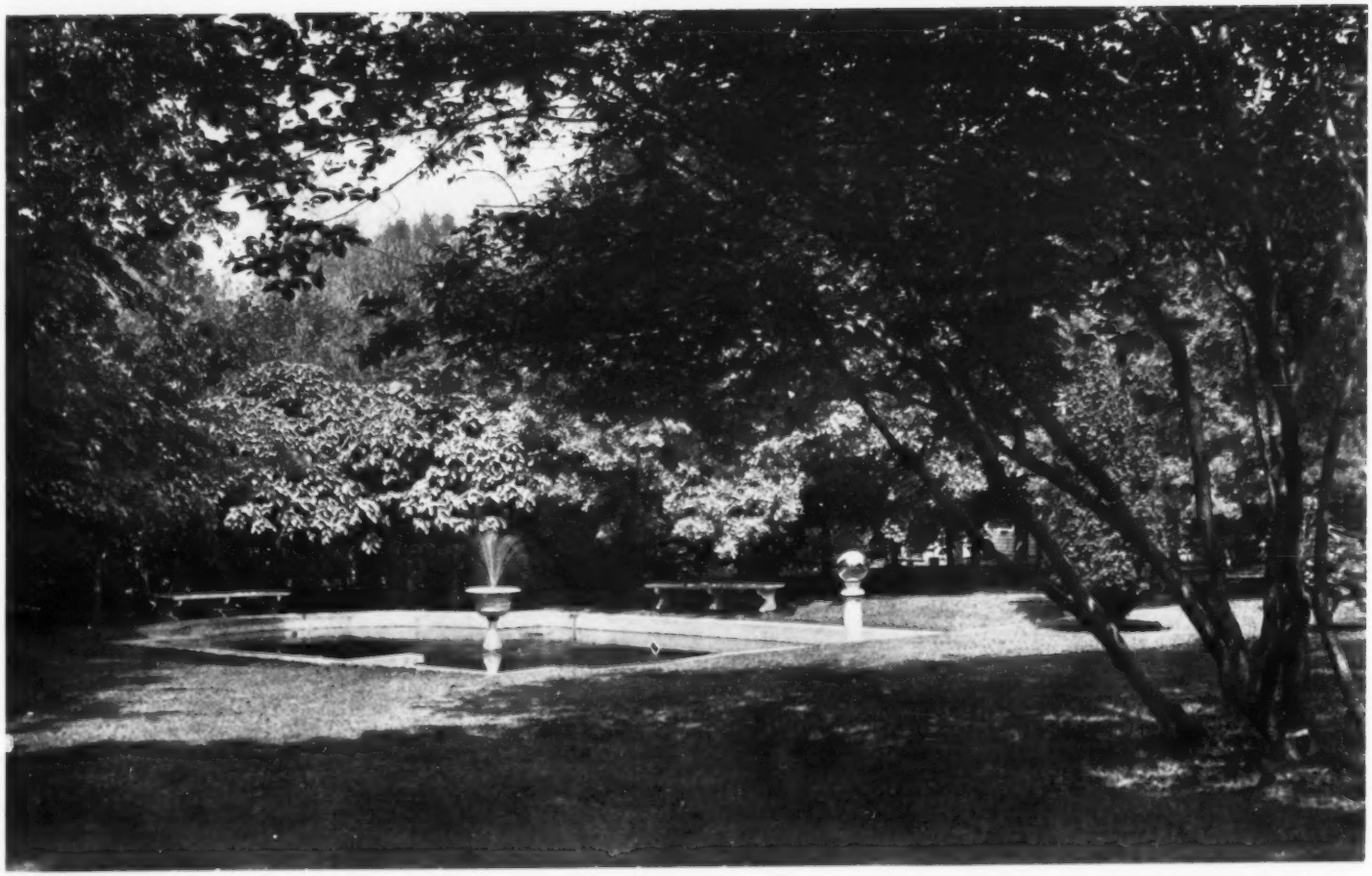


MAIN ENTRANCE DOORS—PARRISH MUSEUM, SOUTHAMPTON, L. I. GROSVENOR ATTERBURY, ARCHITECT.

MAIN ENTRANCE DOORS—PARRISH MUSEUM, SOUTHAMPTON, L. I. GROSVENOR ATTERBURY, ARCHITECT.

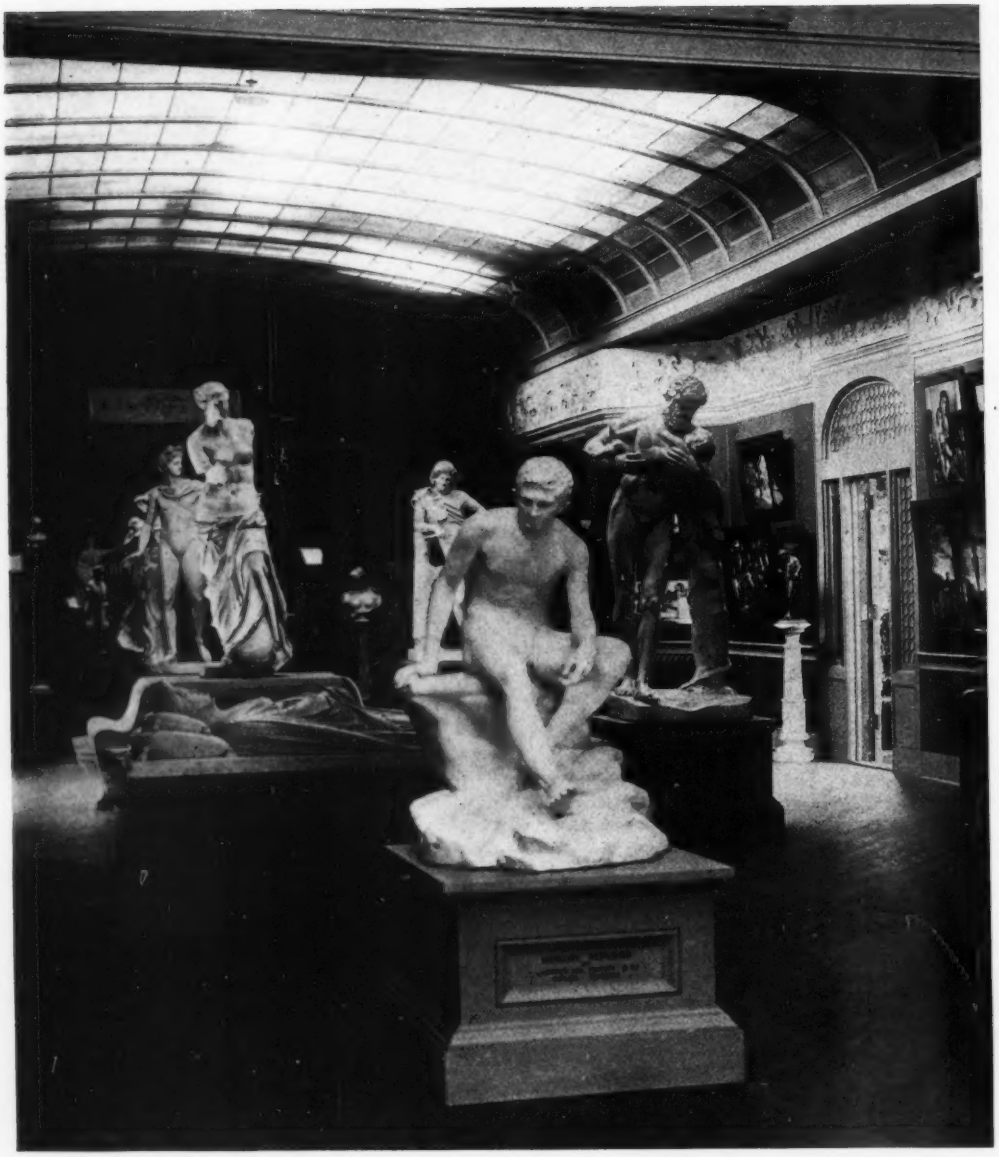
VISTA FROM LOGGIA—PARRISH MUSEUM, SOUTHAMPTON, L. I. GROSVENOR ATTERBURY, ARCHITECT.

PART OF FORE COURT, SHOWING SIDE GATE—PARRISH MUSEUM, SOUTHAMPTON, L. I. GROSVENOR ATTERBURY, ARCHITECT.



POOL IN GARDEN—PARRISH MUSEUM, SOUTHAMPTON, L. I. GROSVENOR ATTERBURY, ARCHITECT.

FOUNTAIN IN GARDEN—PARRISH MUSEUM, SOUTHAMPTON, L. I. GROSVENOR ATTERBURY, ARCHITECT.



INTERIOR, SHOWING VAULTED GLASS CEILING—PARRISH MUSEUM, SOUTHAMPTON, L. I. GROSVENOR ATTERBURY, ARCHITECT.

warmer, lighter undertone. The combination produces a most agreeable background, not only for the marbles and casts of the sculpture collection and for the conservatively toned paintings and photographs in sepia, but for the more intense, highly colored della Robbia terra cottas as well.

Some of these terra cottas, by the way, have been given an architectural setting by Mr. Parrish in a way that is not without interest. It is worthy of notice more especially since we are wont to bewail the absence of such things as artistry and craftsmanship in our modern trades union age. Southampton has been fortunate in still having some few men, Mr. Parrish among them, who have the feeling that not all pottering is wasted time. At the west end of the older gallery stands a large frame, deep in color and generally reminiscent of the Renaissance, which gives a setting to the semi-circular lunette, with panels containing others of similar subject below. These were assembled and the frame built up in a local carpenter shop from the roughest sort of an indicative sketch, drawn to no scale whatever. There was, to be exact, a makeshift full-size detail scratched on a plank of the carpenter's shop floor, but nothing further. The parts were assembled from material at hand, the mouldings used were all taken from stock, and brought to completion through the patience of their builder, as there was no supervision whatever. Finally, another artisan was called in, and he has produced with his colors an ancient tonal quality that is distinctly worthy the carpenter craft which preceded it.

A walk through the grounds may be as informal and unrestrained as was the view of the galleries. The surroundings should perhaps be referred to as park rather than garden, since no formal treatment occurs anywhere, and the planting is confined almost exclusively to shade trees and flowering shrubs, massed informally where needed for background, for screening, or for shady rereats, such as the delightful one that marks the end of the pool. There is much to be found here not only to satisfy the eye of the layman, for its form and color, but to interest the horticulturist for its breadth and sometimes rarity of varietal forms.

One turns away from the gallery and realizes with something of a start that all this lies but a step from the Southampton village street—the drug store, the post office and all the rest. And on second thought one must feel that not the least part of the success of the Parrish Museum lies in its creation within the small compass of its own limits, and within a stone's throw of the nondescript commercial interests of the town of an atmosphere of its own that has in it something of aloofness and much of distinction and of quality.

EUREKA THEATRE, PHILADELPHIA.
STEARNS & CASTOR, ARCHITECTS.

Planning the MOVING PICTVRE THEATRE

By John J. Klaber

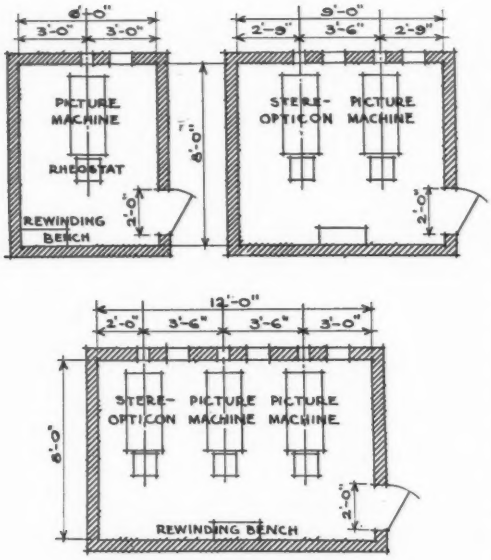
THE growth in popularity of moving-picture entertainments during the past twenty years has been one of the most remarkable phenomena of modern life. The regular theatre has suffered greatly from this new form of amusement, and, in addition, a new public has been formed, indifferent to the older drama, or too poor to patronize it, but whom the moving picture greatly attracts. To satisfy this demand a great number of buildings have been constructed, or, in many cases, altered, the total number of moving picture theatres in the United States being now estimated at over twenty thousand, with a daily attendance of more than five million—one in twenty of the total population of the country.

The design of buildings for the exhibition of moving pictures is not a problem of very great difficulty. The auditorium presents few special problems not found in all theatres, and its usually small size and few balconies further simplify the problem. Nevertheless, the design, from an artistic point of view, has usually been of a very low grade, and it is not easy to find examples that rise above mediocrity. The causes of this are obvious enough, the principal ones being the vulgar taste of the great majority of the owners, and their disinclination to pay the commission demanded by a competent architect. The artistic quality of these buildings has been further degraded by certain firms of decorators who specialize in this type of work, and whose designs are characterized by illiterate trashiness. From a mechanical point of view, also, many moving picture theatres are highly defective, due to lack of attention to the technical features necessary to their construction.

The most important of these is the operating room, or booth. Owing to the inflammability of the celluloid films generally used, for which no satisfactory non-inflammable substitute has yet been found, and to the great heat generated by the electric arc which is universally used for projection, the problem of fire protection becomes one of the greatest importance. It is essential, not only to prevent a fire from spreading to the auditorium, but to avoid a possible panic, which might easily be caused by the sight of smoke or flames issuing from the booth. To this end a special type of construction has been evolved, and its use, now becoming more general, overcomes the dangers produced by earlier conditions.

The booth should be constructed throughout of fireproof material, preferably brick, terra cotta blocks, or reinforced concrete. The last, because of its monolithic character, is perhaps to be preferred, although its weight renders its use impossible in many cases. The walls, floor and ceiling of the booth should all be fireproof, and in no case less than four inches thick, and the roof should be supported so as to resist any internal fire that might occur. It is also essential that the floor be very rigid, as any vibration of the projector is greatly magnified on the screen. Where such a masonry construction is impossible, because of its weight, asbestos boards on a frame of angle irons are often used. This construction is less desirable, but if carefully executed with good materials is far preferable to any method involving the use of wood or other combustible material. If the booth is built on top of an existing wood floor this should be thoroughly protected, asbestos board being generally used for the purpose.

The size of the booth should be sufficient to allow the convenient working of the projectors, as the operator, if cramped, cannot produce good results.



TYPICAL SIZES OF BOOTHS.

The height should be at least seven feet, the depth from front to rear eight feet, and the width six feet for a single machine, and at least three feet more for each additional one. These are minimum sizes, and may be advantageously increased when the available space permits. It is also advantageous to add a fireproof storage closet for films and supplies, and an extra room for rewinding and repairs, and in some localities this is required by law. In any case, the rewinding bench should be constructed entirely of incombustible material.

The operating booth should be well ventilated, and various laws have been made as to the methods to be used. The best method, where it is permitted, is to have inlets near the floor of the room, with a large vent pipe in the ceiling of the booth, leading directly to the outer air. If the inlets can also lead to the outside, this is decidedly preferable to taking air from the auditorium, where it is more or less vitiated, particularly as the operating booth is usually located near the ceiling. The National Board of Censorship recommends 180 square inches of inlet openings for a single machine, and thirty square inches additional for each other, with an exhaust of sixty cubic feet per minute for one machine and thirty for each additional one. A fan is generally used for the exhaust, but if the vent pipe is sufficiently large—about two square feet of area—it may be dispensed with, unless required by law. The omission of the fan is advantageous, as if it is out of order, as may easily be the case, its blades present a considerable obstruction to the free circulation of air.

The vent pipe should be provided with a damper, opening automatically in case of fire, and all other openings in the booth should be provided with self-closing fire-doors or shutters, so that if a fire occurs the exhaust of the vent pipe will prevent any smoke from passing into the hall. There should be but one door to the booth, and this should be a self-closing door, two feet by six. It may be of either iron or tin-clad wood, constructed according to the specifications of the National Board of Fire Underwriters. The other openings include the lens holes and lookouts, one for each machine.

The lens holes should preferably be cut after the machines are in place, as the necessary size and height varies with different machines. They should be large enough to clear the rays of light issuing from the lens, and a conical form is usually best for this reason. The size will depend on the distance of the lens from the wall, a three-inch round hole being sometimes sufficient. The stereopticon, having two lenses, requires a long hole instead of a round one. If there is a spotlight, it requires a fourteen or sixteen-inch hole, but the effect of a spotlight is often produced by the use of special slides in the stereopticon.

The lookouts should be sufficiently large to allow the operator to work either sitting or standing, as his hours are long, and an occasional change of pose adds greatly to his comfort, and consequently to the efficiency of his work. In order that he may be able to see the entire screen at all times, the opening should be twelve inches wide and twenty-four high, and should be provided with a vertically sliding shutter, with an opening the full width and about eight inches high. In many cases, however, smaller openings than this are required by law.

The lookout for the stereopticon, and for the spotlight, if one is used, may be smaller, a ten-inch hole being ample, in view of their less continuous use.

The fire shutters for all these openings, as well as for the air inlets, should be of iron, not less than one-sixteenth inch thick, or of hard asbestos board, not less than three-eighths inch, the latter being strengthened with flat iron bars. They should run vertically, in carefully made metal grooves, and should be held up by cords, controlled by a master cord soaked in inflammable wax, and passing close to all the machines, the rewinder, and the film storage box, so that all the shutters close automatically in case of a fire at any point. The same master cord should automatically open the outlet damper.

The booth should be well lighted, with one lamp over each machine, and wall plugs for the attachment of additional lamps on flexible cords, allowing their use at any point. The interior should be painted a dark color, preferably a dead black or dark green. The exterior will, of course, conform to the general treatment of the hall. Provision should be made for the necessary switchboards, although the main house switchboard is better placed outside the booth. The rheostat or other resistance may be variously placed, preferably outside the booth or on a high shelf, where the heat generated will cause less inconvenience to the operator. It is also advisable to run a stovepipe directly to the vent flue from the rheostats, as well as from the projectors, to avoid heating the booth more than necessary. Everything, in fact, should be done for the comfort of the operator, as on him depends the success of the theatre.

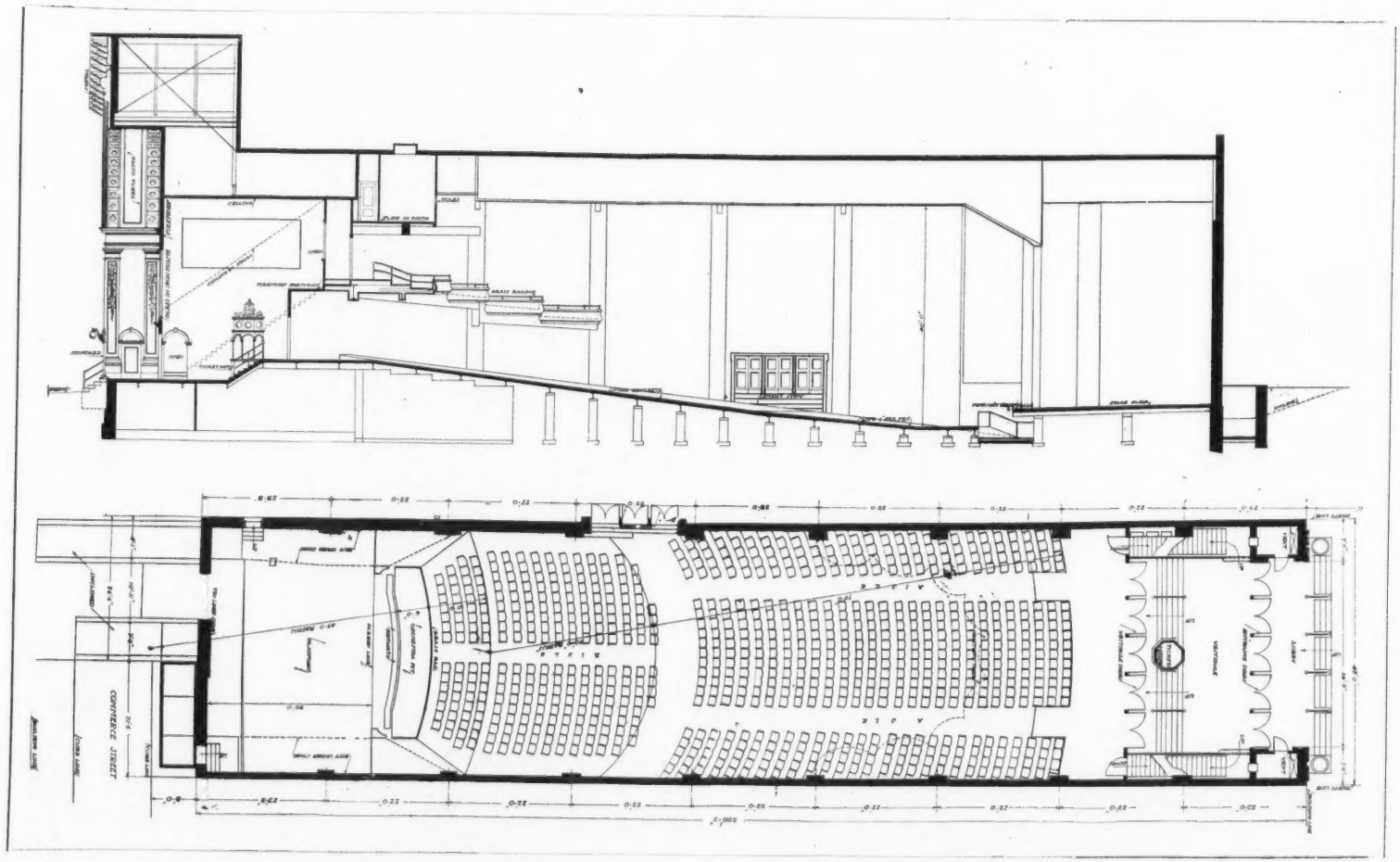
The screen upon which the pictures are projected may be constructed in several different manners. Where it can be permanently fixed against a wall a plaster surface is one of the best types. It must, however, be very carefully made, as all irregularities are strongly shown up by the powerful lighting. Such a screen is usually finished with a coat of dull enamel or whiting, slightly tinted with blue, to increase its brilliancy. A surface painted with white lead paint is also sometimes used. When the screen must be movable, white muslin is the most common material. It is, however, less brilliant than plaster, and requires frequent replacement because of its tendency to become dirty. It has also the disadvantage of being unsteady, due to air currents that cannot be eliminated. Dull finished aluminum has also been used, and gives a very brilliant image. The most brilliant, however, is a frosted plate glass mirror. The use of this type is limited by its weight and the impossibility of producing it in very large sizes, thirteen and one-half by eighteen feet being the largest size generally manufactured. In a few cases a transparent screen is necessary, and here muslin or frosted glass is generally used.

In order to provide a frame for the picture, a black border is painted on the screen, of such a size as to lap over the edges of the projected image about three or four inches. This increases, by contrast, the brilliancy of the picture, and lessens the effects of vibration. A dull finished paint must, of course, be used, to prevent reflections. The space around the screen should be simply treated, and dark in color. Black velvet draperies are often used, and produce an excellent effect.

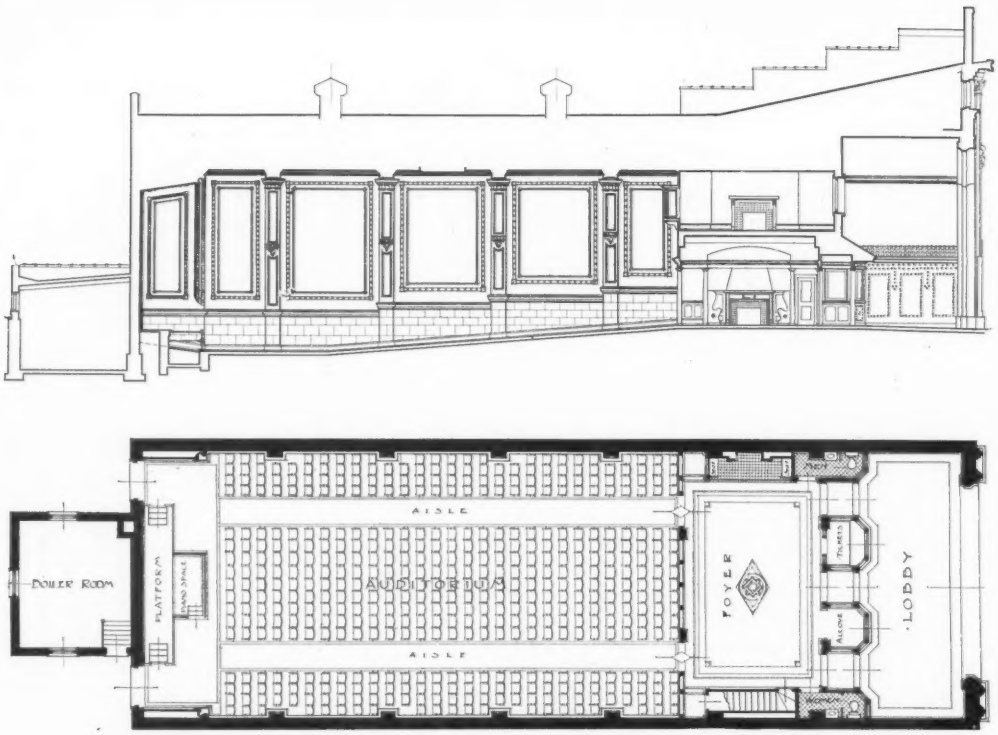
The size of the screen need not be very great. An image nine feet by twelve is visible up to one hundred feet, and gives figures of approximately natural size. For longer houses a larger screen is necessary. It is also important that the screen should not be too high from the floor, in order that the figures may appear to walk on the ground and not in the air.

The position of the projector, relatively to the screen, is a matter of some difficulty. The ideal would be to have the projector directly opposite the center of the screen, but this is seldom possible. It should, however, be approximated as nearly as conditions permit, as any divergence produces distortion of the image. The operating room must nearly always be placed rather high, and it should be as far back as possible, as the angle of the rays is thus reduced to the minimum. It is generally considered that

VICTORIA THEATRE, PHILADELPHIA.
STEARNS & CASTOR, ARCHITECTS.



LONGITUDINAL SECTION AND PLAN OF FIRST FLOOR—VICTORIA THEATRE, PHILADELPHIA. STEARNS & CASTOR, ARCHITECTS.



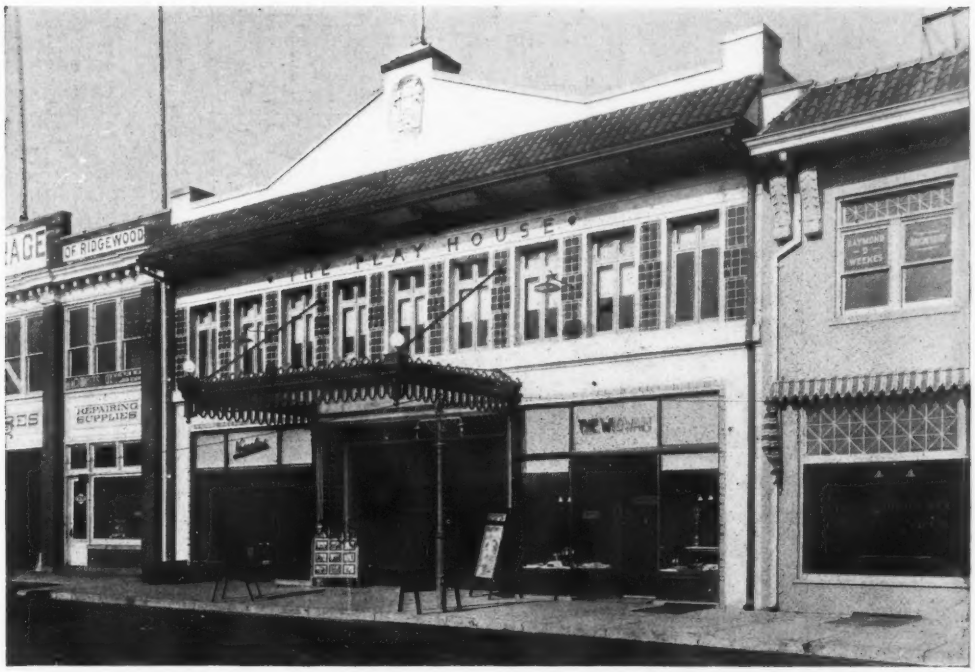
LONGITUDINAL SECTION AND GROUND FLOOR PLAN—EUREKA THEATRE, PHILADELPHIA.
Stearns & Castor, Architects.

the distance from the projector to the screen should not be less than seventy-five feet. Care must also be taken that the projector is high enough so that the rays are not interrupted by the heads of any part of the audience.

The planning of the hall demands a somewhat different arrangement than that of the regular theatre. Seats at the sides of the house, which are tolerable for ordinary productions, are almost worthless for moving pictures, because of the distorted view of the screen. The best seats, also, are not near the screen, but at a distance of from seventy to one hundred feet, where the vibration of the pictures is less apparent. If boxes are used, they should therefore be placed at the rear of the house, and stage boxes should be eliminated, unless the moving pictures are a very minor part of the entertainment. Where there is a stage, the screen should, if possible, be placed at the back, as this increases the distance to the audience and improves the view.

The slope of the floor must be carefully worked out, as in an ordinary theatre. In fixing the height of the balcony, when one is used, care must be taken that it is high enough not to interfere with the view of the top of the screen from the rear of the main floor. This may require a greater height than would be necessary for other types of performances. Too steep a floor should, however, be avoided, the limit being usually fixed by law. Slopes are preferable to steps, if not too steep, and an effort should be made to have the rear of the main floor as near the street level as possible, for ease of exit.

In laying out the seats the temptation is always to crowd them too much, but this is not advantageous, as it may cause the theatre to become unpopular, and it also increases the fire risk. The rows of seats should not be less than thirty-two inches from back to back, and a width of less than twenty inches is not advised. The seats need not be uphol-



THE PLAYHOUSE, RIDGEWOOD, NEW JERSEY.
Davis, McGrath & Kiessling, Architects.

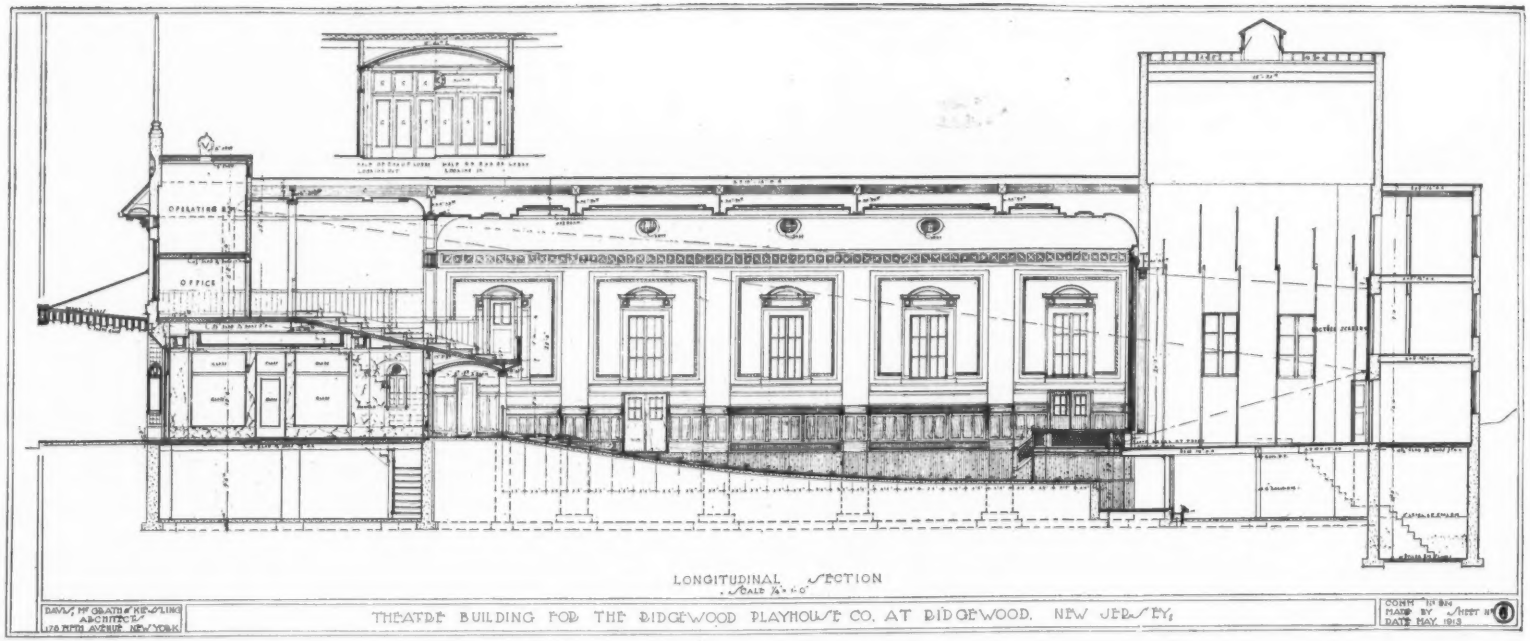
stered, as the performances are usually short. Wood opera chairs are the best type for this purpose. They should be securely fastened to the floor, and no loose chairs should be used in the auditorium, except in boxes.

Because of the vibration of the image the first row of seats should not be less than ten feet from the screen. At the rear there should be at least six feet of clear space, and more in a large house. No aisle should be less than three feet wide, nor should the total width of the aisles be less than one foot for every fifty seats. The aisles should not be too far apart, no seat being more than seven seats away from the nearest aisle.

Fire escapes should be provided for the balcony when one is used. This matter is usually regulated by law, but where there is no law the recommendations of the National Board of Censorship, which are based on a thorough investigation, should be followed. It is generally required that balconies contain not more than one-third the total seating capacity of the hall.

The lighting of the hall need not be very strong, but it should be sufficient so that spectators may be able to enter or leave at any time. Either direct or indirect lights may be used, but any direct lights should be shielded so as to avoid glare. Ceiling lights are the best for this type of building, and any side brackets used should be high enough not to interfere with the audience. Red lights should be placed at all exits. In order that the opening of the doors may not flood the screen with light from the street, partitions should be placed in front of the main doors at about four feet distance.

The heating and ventilating of the hall is a matter of greater difficulty, as the standards of ventilation are somewhat uncertain. The great volume of moving air formerly considered necessary is now no longer advocated, but greater stress is laid on temperature and humidity control. The American Society of Heating and Ventilating Engineers recommend a circulation of fifteen cubic feet per minute per person, with a temperature not

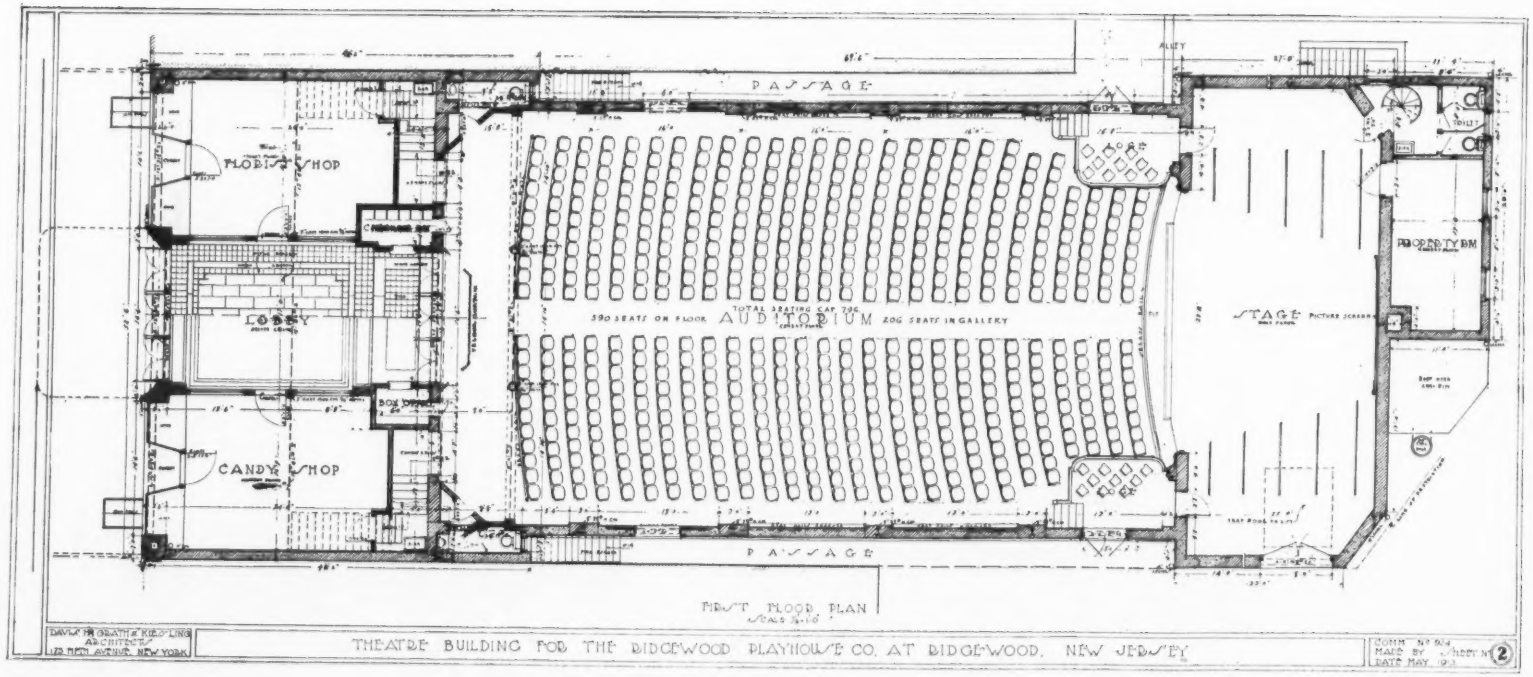


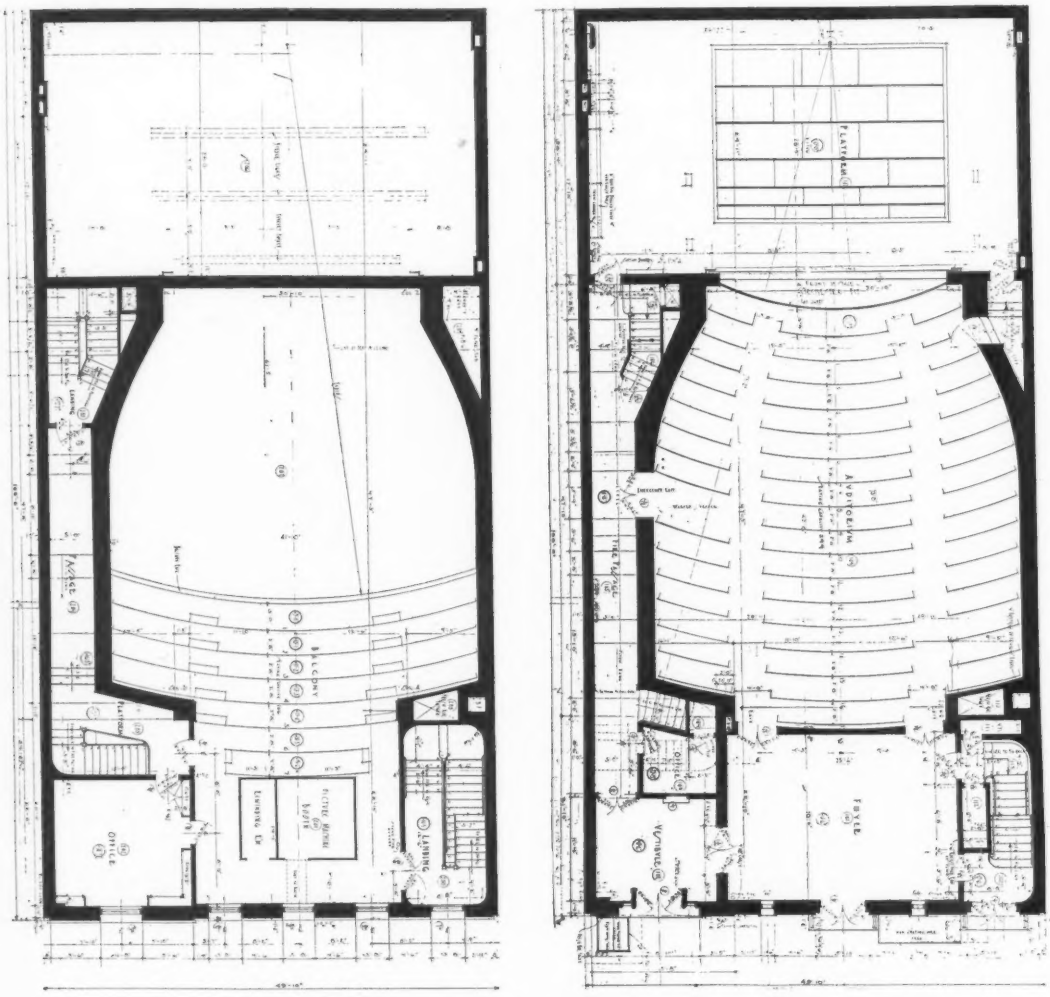
LONGITUDINAL SECTION
SCALE ¼"=1'-0"

DAVIS, McGRATH & KELLING
ARCHITECTS
170 FIFTH AVENUE NEW YORK

THEATRE BUILDING FOR THE RIDGEWOOD PLAYHOUSE CO. AT RIDGEWOOD, NEW JERSEY.

COMM. 1st Bld
PLANS BY
DATE MAY, 1913
SHEET No. 6


PASSAGE
ALLEY
FLORIST SHOP
LOBBY
CANDY SHOP
BOX OFFICE
TOTAL SEATING CAP. 796
590 SEATS ON FLOOR
AUDITORIUM
206 SEATS IN GALLERY
STAGE
PROPERTY RM
PASSAGE
FIRST FLOOR PLAN
DAVIS, POMEROY & KILGORE
ARCHITECTS
122 EAST 42ND ST. NEW YORK
THEATRE BUILDING FOR THE RIDGEWOOD PLAYHOUSE CO. AT RIDGEWOOD, NEW JERSEY
JOHN No 904
MADE BY
DATE MAY 1931
SHEET No 2

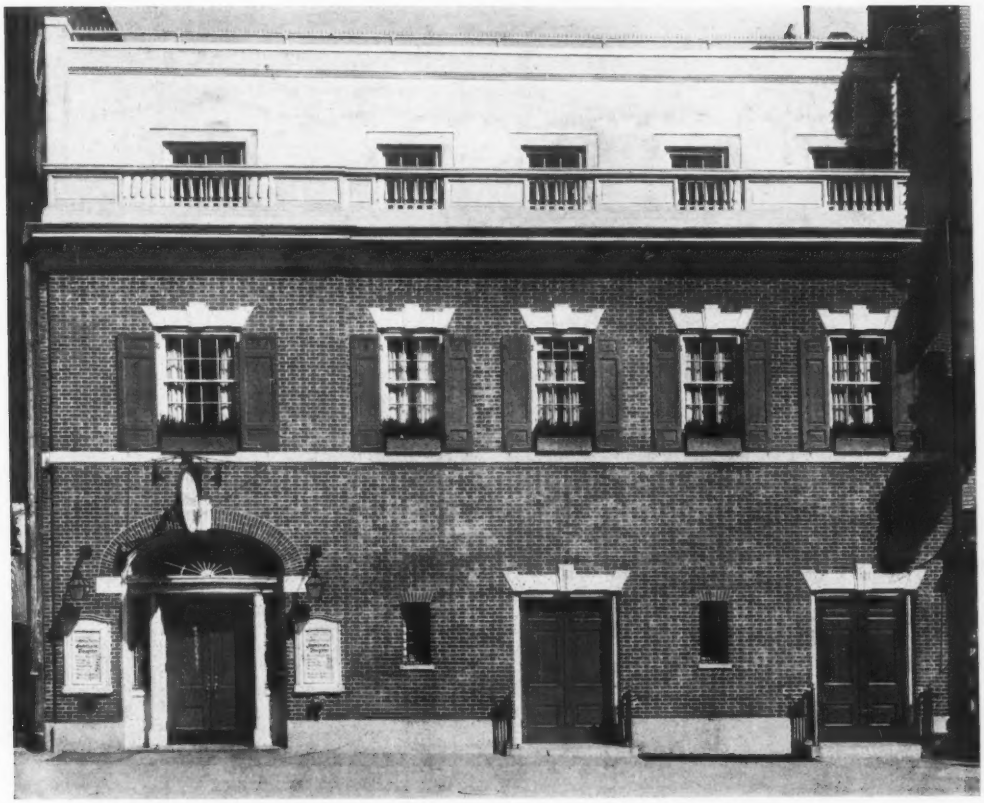


PLANS OF FIRST AND MEZZANINE FLOORS—NEIGHBORHOOD PLAYHOUSE, NEW YORK.
Harry Creighton Ingalls and F. Burrall Hoffman, Jr., Associate Architects.

less than sixty-two to seventy degrees at the breathing line. They recommend also a total capacity of eighty cubic feet per person in the hall, with four and one-third square feet per person exclusive of passages. This floor space is more than complied with by the normal spacing of seats. The air may be heated in various ways, but the use of gas radiators should in no case be tolerated.

The type of hall where the screen is at the same end as the main doors has been advocated by some authorities as lessening the fire risk, since the audience face toward the principal exits, and need not pass the operating room to reach them. It has the disadvantage of interfering with the attention of the audience, due to the frequent entrances and exits, and is seldom used. An emergency exit at the screen end of the hall is, however, advisable, and is frequently required by law.

The decoration of the hall is usually simple. No great elaboration is necessary, as the waits between reels are usually short, and the audience has little time to admire the auditorium. In the design of the exterior provision must be made for ample entrances and exits. The

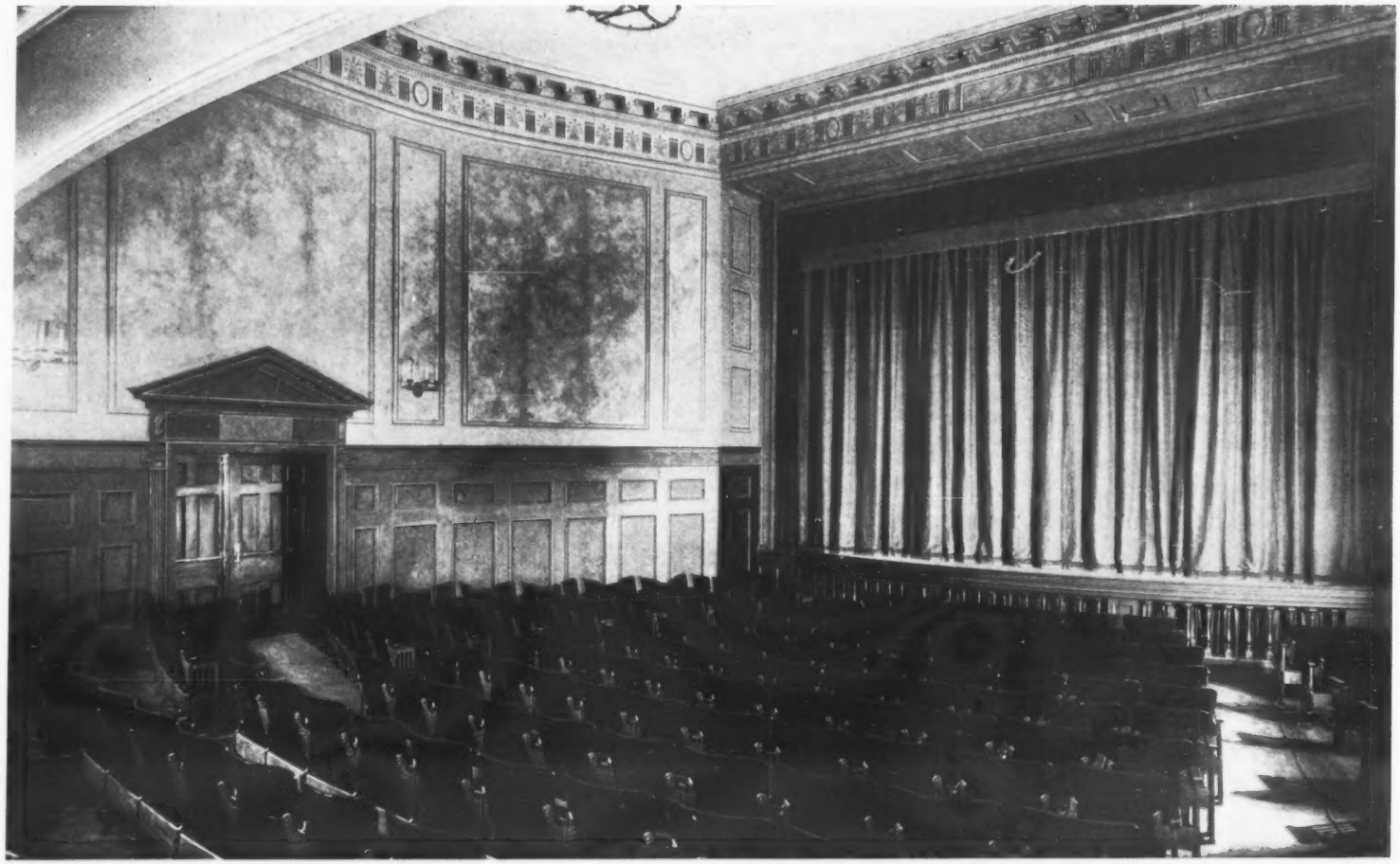


THE NEIGHBORHOOD PLAYHOUSE, NEW YORK.
Harry Creighton Ingalls and F. Burrall Hoffman, Jr., Associate Architects.

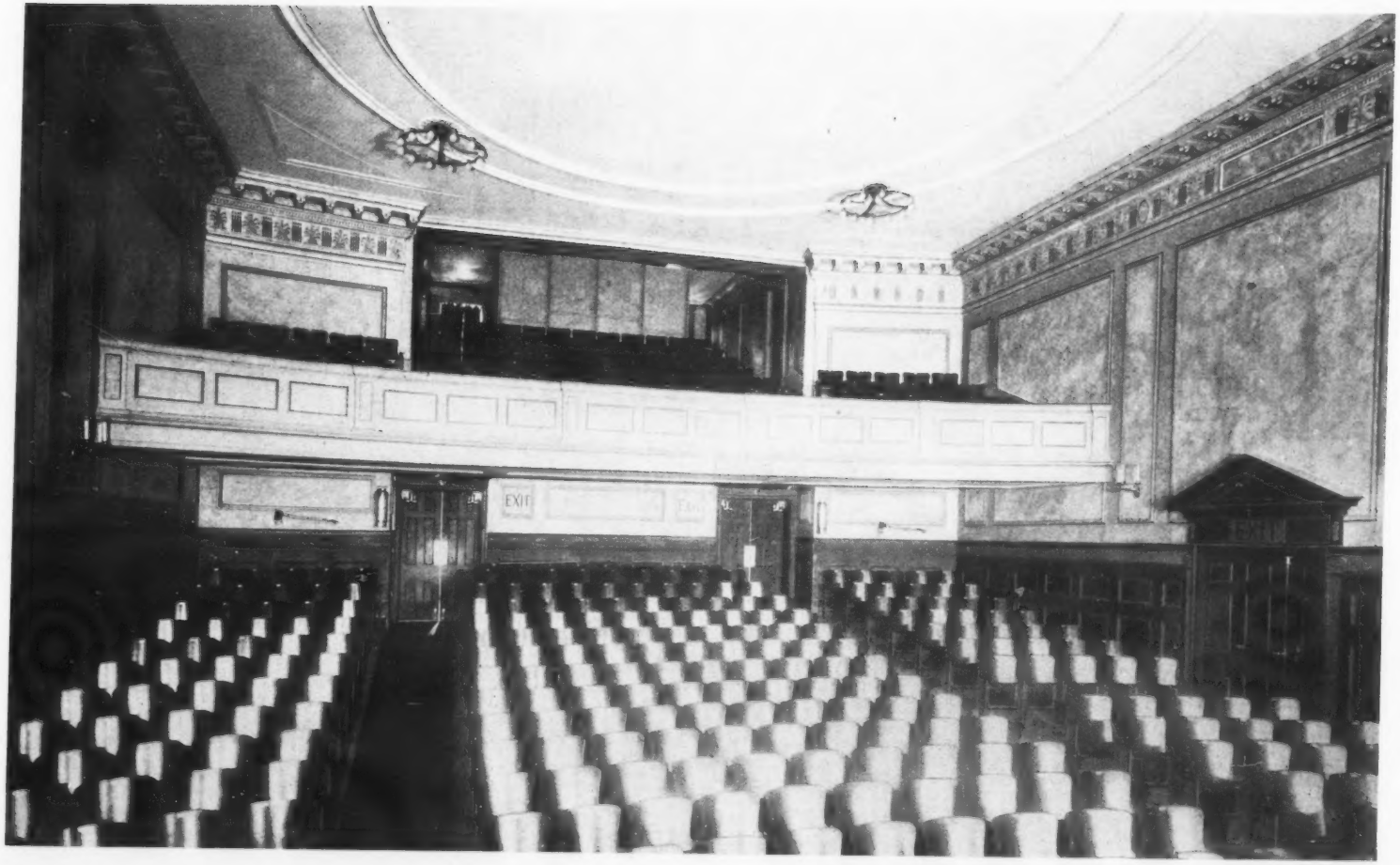
most usual type has a lobby six feet deep or more, extending almost across the entire front. In the center of its rear wall is the ticket booth, flanked by the entrance and exit doors. Spaces should, if possible, be provided for the placing of posters, but this is rendered difficult by their great variation in size. If the picture companies could be induced to standardize the size of posters a great improvement in this respect would be possible. The inevitable electric sign should also be made part of the design, instead of being, as it usually is at present, a hideous excrescence. This reform, unfortunately, involves the education of the owners, a matter of considerable difficulty.

The laws governing moving picture theatres vary considerably in the different cities and States, and have led to certain differences in planning. In New York City, for example, the building is subject to the theatre regulations if its seating capacity exceeds six hundred persons, or if it has a stage with scenery, while smaller houses without scenery are governed by a law whose provisions are entirely different, and in most respects less rigorous. In the main, however, these buildings tend toward certain well-defined types, examples of which are shown by the accompanying illustrations.

The Eureka Theatre, in Philadelphia, is an excellent example of the small building used for moving pictures exclusively. The plan represents the simplest type, a rectangular hall with no stage or balconies. In the front is an open lobby, followed by a foyer, with which communicate small toilet rooms at the two sides. The operating booth is placed above the foyer. The auditorium is thirty-eight feet by seventy-six, with



INTERIOR OF AUDITORIUM TOWARD STAGE—NEIGHBORHOOD PLAYHOUSE, NEW YORK. HARRY CREIGHTON INGALLS AND F. BURRALL HOFFMAN, JR., ASSOCIATE ARCHITECTS.



INTERIOR OF AUDITORIUM TOWARD BALCONY—NEIGHBORHOOD PLAYHOUSE, NEW YORK. HARRY CREIGHTON INGALLS AND F. BURRALL HOFFMAN, JR., ASSOCIATE ARCHITECTS.

a seating capacity of four hundred and seventy-seven. The front of the building is of white terra cotta, treated in a very modern style, and is unusually good for a building of this class.

The Victoria Theatre, while less interesting in façade, is worthy of attention because of the development of its plan. The building is forty-eight feet wide and two hundred feet long, running from street to street, and advantage has been taken of this location in providing exits at the screen end, with passages under the stage. The plan is more complete than that of the Eureka Theatre, having a complete stage, and a balcony of considerable size. Having been built several years ago, it contains certain features that would not be considered desirable, notably the stairs at the main entrance. In the main, however, the plan is excellent, and shows the possibilities of a lot offering considerable difficulty of treatment because of its excessive length, and of the difference in the levels of the adjoining streets. The drawing of the plan shows the method adopted in laying out the seats in the auditorium. Toilet rooms are provided in the basement under the vestibule, being reached by the stairs at the rear of the hall. The front, as in the Eureka Theatre, has been developed as an ornamental frontispiece, with a height exceeding that of the actual building.

The Ridgewood Playhouse represents a different type of plan, in which a portion of the front has been given up to small shops, leaving a lobby of considerable depth. The building is equipped not only for moving pictures but also for dramatic performances and concerts, and it is this consideration that has caused the introduction of the loges at the sides of the proscenium. The passages at the sides of the building provide fire exits from the balcony, which extends back over a portion of the entrance lobby. The auditorium is decorated in tones of brown and gold, the intention being to avoid the usual gaudy type of theatre interior, particularly in view of its fitness for concerts. The front of the building is of stucco, inlaid with brown tiles that recall the decorations of the interior, and is notably successful in that the architects have succeeded in preventing a loss of unity as a result of the introduction of the store fronts.

The Neighborhood Playhouse, in Grand Street, New York City, is an example of the type of theatre in which the exhibition of moving pictures has become subordinate to its other uses. The building was erected by the workers of the Henry Street Settlement for the encouragement of dramatic art among the people of the neighborhood, and is used for regular performances about one-third of the time, the remaining evenings being devoted to moving pictures. The architectural treatment, which contrasts strongly with its surroundings, recalls the Little Theatre, designed by the same architects, although necessarily less luxurious in character. The auditorium is comparatively small, and its form is a compromise between that of a regular theatre and of one used exclusively for moving pictures. It is very simply but effectively treated, the detail being inspired from Georgian examples. The walls are panelled and tinted in a color resembling that of old parchment, with the details in darker tones. The front of the building is of red brick, its detail following also the Georgian precedents. The third story, above the auditorium, is set back from the building line, and treated in stucco. It contains studios, coat-rooms, and other accessories. A special feature of this front is the modest but effective illuminated sign over the main entrance, which adds to the beauty of the structure instead of disfiguring it, as would such an electric sign as is generally used on buildings of this character.

MARQUISE OF THE VANDERBILT HOTEL, NEW YORK.
Warren & Wetmore, Architects.

The MARQVISE ~ AND ITS DESIGN

By John T Fallon

IN the stupendous growth in size and luxury of hotels, department stores and other similar institutions of modern city life, a distinctive feature is the care and consideration that is given by their builders to the comfort of the patrons. An exemplification of this is the extensive use that is being made of the marquise as a protective shelter for those who arrive or leave by motor car or carriage.

As the name would imply, the marquise is of French origin and. we have been forced to borrow not only the architectural idea, but also the nomenclature. It would seem more correct, having once adapted it to the peculiar conditions of our own climate, to Anglicise the name, but the word marquee has already a place in the English language, with a meaning considerably different, namely, that of a large or elaborate tent. The use of the marquise in France has been confined to comparatively recent years and one searches in vain among the old hotels of the Faubourg St. Germain for examples of how the architects of the eighteenth century might have solved this problem. Its development in this country is also one of the last few decades and it is only the exigencies of modern cities and their restrictions in regard to planning that have stimulated an interest in the design of this architectural accessory.

The functions of the marquise are few and defined and its decorative possibilities limited, but to realize that they are not thoroughly appreciated, one has only to recall the comparatively few examples that impress themselves upon one's mem-

MARQUISE OF NO. 998 FIFTH AVENUE.

ory as being at all out of the commonplace. But the study of its various solutions by prominent architects reveals how much grace and beauty there is to be attained by an intelligent handling of its design; from an awkward and ungainly shape, it has been transformed by them into a complementary adjunct of distinction.

The earlier designs of the sidewalk marquise almost invariably show supports at the curb line and several interesting examples reveal the artistic possibilities of this type. The only one illustrated is that in front of Sherry's, which is scarcely typical, since it seems to have been designed originally without supports and to have been added to at a later date. This type was, however, doomed to be short lived, owing to the obvious lack of freedom of circulation, and comparatively recent ordinances in New York and other cities have been the direct means of fostering the development of the latest and what seems to be the ultimate type, namely, that without supports at the curb line.

In this form it becomes elementally a roof, supported either by brackets or consoles, or suspended entirely from above. Its chief aesthetic requirement is obviously that of lightness, which may be achieved in several ways: by eschewing bulk, both in the constructive and the decorative members, and by a nice relation between it and its apparent supports. When these latter take the form of brackets, etc., their adequacy to support the projecting mass should be unquestioned by the eye. The marquise of the Ritz-Carlton Hotel is illustrative of this particular point, in being apparently carried upon light but strong decorative members that run to the ground.

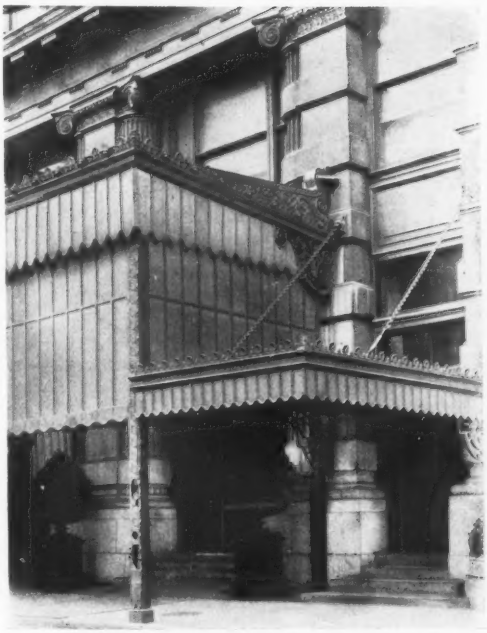
The slope or pitch of a flat roofed marquise is not a negligible quantity, since this may be made to contribute greatly

MARQUISE OF NO. 998 FIFTH AVENUE, NEW YORK.
McKim, Mead & White, Architects.

to the quality of distinction. A marquise with excessive pitch will appear stiff and awkward, while one that is too flat will be squat and graceless.

The decoration of the marquise is usually restricted to its structural parts and examples like those at the Waldorf Astoria prove that these limitations work for the best results. Quietness and simplicity are more admirable qualities than attempted originality and unrest. For the most prominent part of the marquise, the crown mold, an imaginative designer will adapt a wide range of motives, while the accompanying cheneau lends itself admirably to the gracefulness of Pompeian work or to the delicacy of the Adam style. In the illustrated examples at Shanley's and the Biltmore, designs applied to a glass background form a pleasing motive that at night becomes a series of fanciful silhouettes.

If the supports are in the form of tension rods or chains, little decoration is necessary or desirable; their connection with the wall above, however, affords a chance for a spot of decoration that has been taken advantage of, as at the Vanderbilt Hotel. If brackets are used, there is no limit to the variety of design; the brackets on the marquise at Sherry's are a suggestion for the ultimate effect to be sought for.



MARQUISE OF SHERRY'S, NEW YORK.
McKim, Mead & White, Architects.

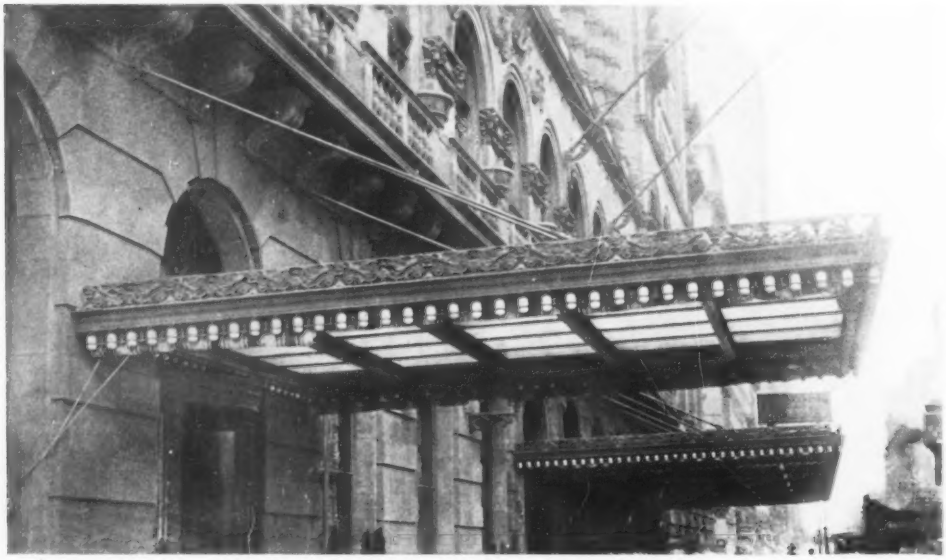
A feature of the marquise that is too often neglected is the ornamentation of the soffit, and at night the lighting only too plainly reveals the lost opportunity of the designer. This has been carefully thought out in the design of the example at 998 Fifth Avenue, where good con-

MARQUISE OF BLACK, STARR & FROST BUILDING, NEW YORK.
Carrère & Hastings, Architects.

MARQUISE OF THE CENTURY THEATRE, NEW YORK.
Carrère & Hastings, Architects.

struction has been supplemented by the use of simple moldings; the soffit of the marquise at the Vanderbilt Hotel is even more elaborately detailed and leaves little to be desired in this requirement.

The structural design of the marquise is of no small importance, since, after the stresses have been determined, and the members laid out, adjustments may often be made that will enhance the design without weakening the framework. As usually designed, a framework of I beams supports the intermediate bars, which in turn hold the glass, and which are made

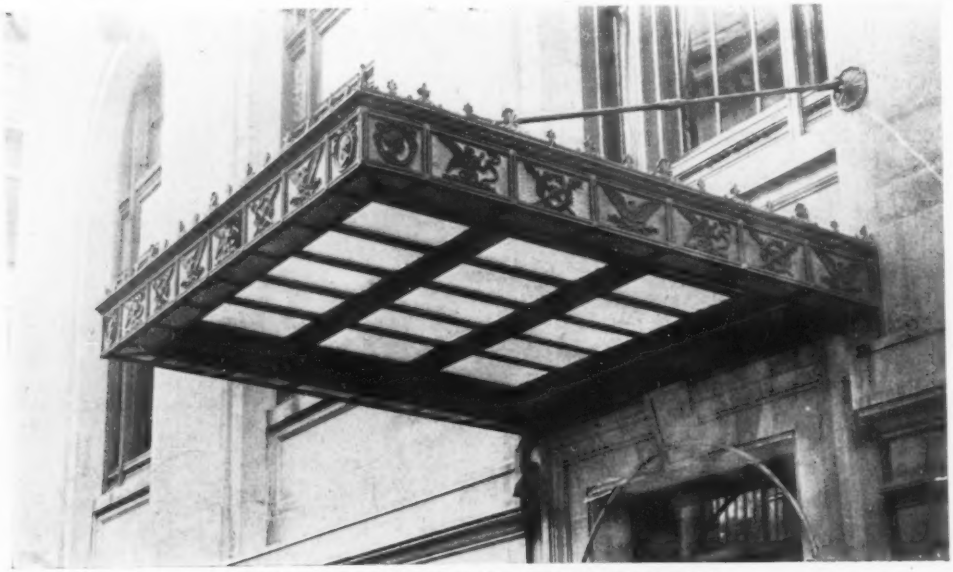


MARQUISE OF THE WALDORF-ASTORIA, NEW YORK.
Charles A. Platt, Architect.

MARQUISE OF SHANLEY'S RESTAURANT, NEW YORK.
Charles A. Platt, Architect.

weatherproof by ordinary skylight construction. Wire glass is used to protect pedestrians from falling fragments in case of breaks, and it is often additionally shielded by a covering of wire netting, as at the Ritz-Carlton, which receives the shock of any falling object.

The structure of the walls will determine what proportion of weight may be carried by the tension rods; when the load of these latter can be transmitted directly to the steel framework of the building, no other provision need be made for the marquise than to take the vertical lead at



MARQUISE OF THE BILTMORE HOTEL, NEW YORK.
Warren & Wetmore, Architects.

MARQUISE OF THE ALTMAN STORE, NEW YORK.
Trowbridge & Livingston, Architects.

the wall. But sometimes it may be found necessary to cantilever out from the wall, in which case the supporting rods become subordinate in importance.

The drainage is best connected with the system inside the building, but if this is impracticable, it should at least not be allowed to flow over the sidewalk and never to discharge directly from above. The lighting is best confined to the outer edge and the illustrations show a variety of methods of combining this with the decorative members, but if additional illumination is required, conduits may be run along the intermediate beams, a not altogether happy arrangement unless the beams are to be covered. At the Vanderbilt Hotel, the lights are placed entirely above the glass and the resulting illumination is soft and diffused, but with this arrangement the slightest accumulation of soot or dirt upon the top of the skylight is made evident.

The marquise designed for the apartment house at 998 Fifth Avenue, by McKim, Mead & White, presents a very skillful handling of the problems mentioned above and unites practically all the qualities desirable in this adjunct. The shape chosen is a felicitous one, viz., that of a sloping roof with intermediate trussed supports which are held at the wall line by small consoles. The cheneau has a distinctly metallic quality and the added shelter provided by the introduction of a member of glass is made without any sacrifice of lightness. Decorative chains are tied to the wall by a familiar Florentine motive that is here quite appropriate. The photograph shows clearly how little light is cut off and how

MARQUISE OF LORD & TAYLOR'S STORE, NEW YORK.
Starrett & Van Vleck, Architects.

well it is fitted into the architecture.

Similar in design is that of the Century Theatre, by Carrère & Hastings. A feature of this example is the flatness of the ornamental parts, but the silhouette is less varied, and because of that it has the appearance of greater weight. The intermediate trusses are supported by well-detailed masks. A more successful example from the same office is the exquisite marquise from the jewelry shop of Black, Starr and Frost. The details are here studied with the care and precision of a goldsmith, and the eagles on the corners and the consoles are delicate pieces of modelling and casting. It may be noticed from the photograph that even the turnbuckles on this marquise have received attention.

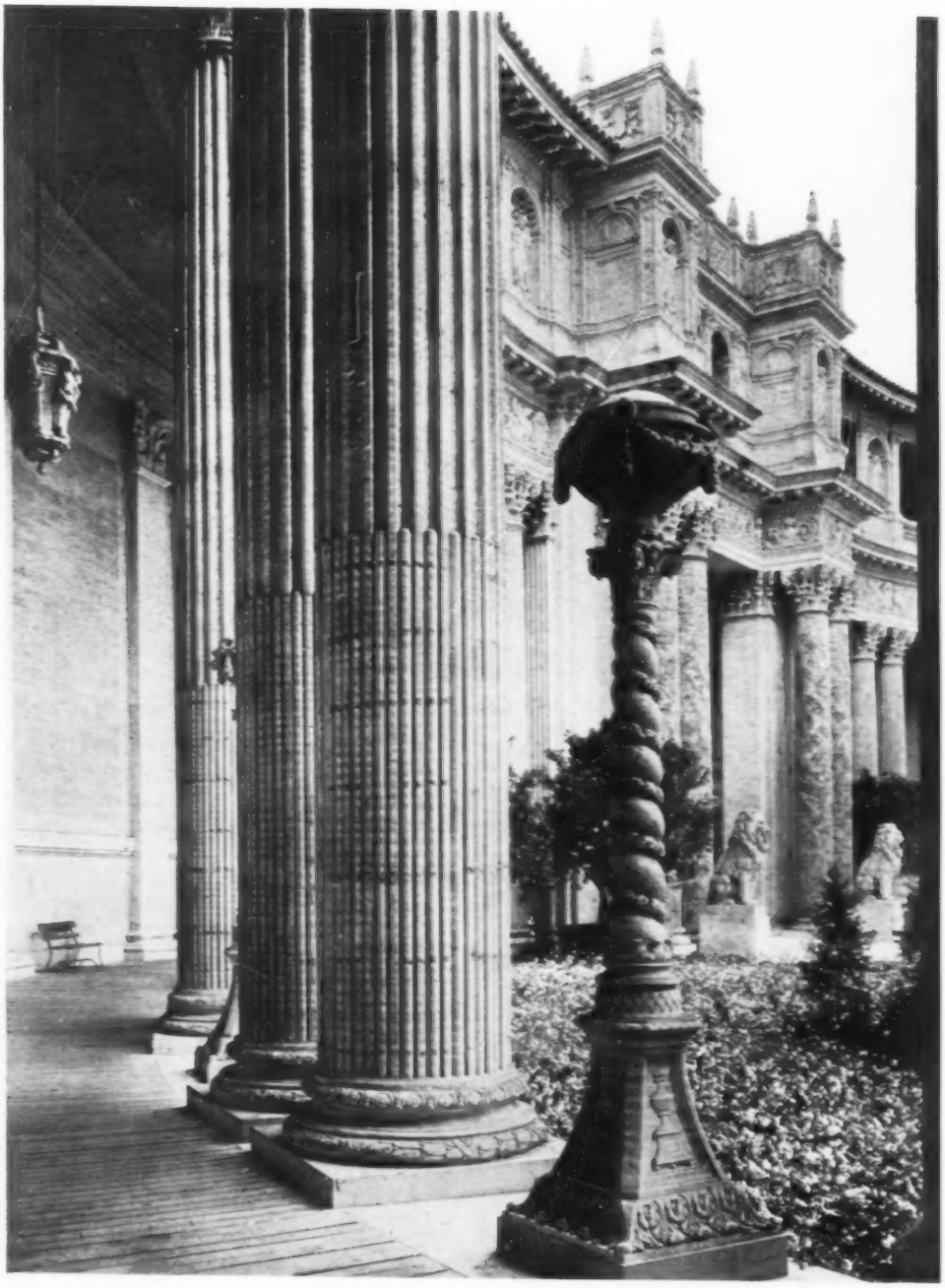
MARQUISE OF THE RITZ-CARLTON, NEW YORK.
Warren & Wetmore, Architects.

The illustrated designs from the office of Chas. A. Platt show his accustomed fertility of imagination in matters of detail. Almost the only bit of ornament on the marquise of the Waldorf Astoria Hotel is a delightful cheneau, where classic motives are handled with a free restraint. The lighting is here made an ornamental feature and provides a series of accentuations along the front. The example taken from Shanley's restaurant is full of appropriate lightness and freedom. The frieze of silhouettes is full of decorative value both by day and by night, while the addition of the dolphins on the corners of the roof is an ingenious conceit.

The marquise of the Vanderbilt Hotel, Warren and Wetmore, architects, is unique in its shape, which is hardly the most practical one, affording as it does complete shelter for but one carriage at a time. But its decorative qualities are unquestioned, and it spreads out like a huge Chinese parasol and ties in well with the Adam window above. A note of interest is introduced into the supporting rods at their connection. By the same architects are the marquise at the Biltmore Hotel and the Ritz-Carlton Hotel. At the Biltmore a novel scheme of lighting is obtained by enclosing the bulbs in a continuous glass frame which diffuses the rays of light. Here again a series of metal designs are applied to the glass with effective result. The point of interest in that of the Ritz-Carlton is the supporting piers of decorative ironwork that mark the line of the fence; their gracefully wrought detail adds greatly to the richness of the design.

A special type of marquise is that shown from the Lord and Taylor store, Starrett and Van Vleck, architects. It extends only a few feet from the building and rises in a sweeping curve from the support of heavy brackets; the detailing of these is perhaps a trifle weighty, but the motives used are classic and appropriate. Still another special type is that from the Altman store, Trowbridge and Livingston, architects, where the marquise is composed in connection with storm doors; in spite of the number of motives to be combined, the effect is still one of lightness.

Through all the examples illustrated runs the same conscious striving for a finely expressed solution, the same desire to make out of a utilitarian accessory an object of beauty, which after all is the identical force that in the days of the Renaissance clothed every necessary detail of life in an aesthetic form. We may look to the future for new solutions of the marquise, for by no means has everything been said upon the subject.



VISTA IN COURT OF FLOWERS—PANAMA-PACIFIC EXPOSITION, SAN FRANCISCO.

VISTA FROM LAGOON, FINE ARTS ROTUNDA—PANAMA-PACIFIC EXPOSITION, SAN FRANCISCO.

TEXTURE & COLOR at the PANAMA-PACIFIC EXPOSITION

By Paul E. Denivelle

Supervisor of Architectural Modeling and Texture for the Exposition

THE Roman polychrome texture and tone imprinted upon every architectural detail, wall surface and work of sculpture at the Panama-Pacific International Exposition bring into intimate relationship the various units composing the exposition in a manner no other material could have done. Applied, as it has been, to almost every architectural period and style in ornamentation and sculpture, Greek, Roman, Gothic, Renaissance, Saracenic, always enhancing the designer's effort, "travertine," as our simulation, in warmer tones and richer colors, of the natural stone is called, has proved to be the Volapük of materials, capable of all forms of architectural and sculptural expression.

The exposition has its partie so laid out that the main exhibit palaces and the different courts are united in a continuous chain, the whole forming a sort of walled city. The line of demarkation between the different courts, each in a different period of style and by different architects, is not apparent to the layman because of the absence of a structural line of separation between the courts and exhibit palaces. The structural wall of any one of these is also that of its neighbor. It was therefore but logical that a uniform scheme of texture and color should be practicable.

One will readily see that this treatment did not mean monotony of effect. In simulating the real travertine, we went

a step farther and provided a variation in degree of texture and in tone of color. This variation was based on the varying scale of the objects, buildings or courts to which it was applied. In the Fine Arts rotunda, for example, the scale was such, the units were so large, and the planting was so profuse, as to call for a texture large and deep in scale and to demand strong color pigments in the general surface; six months of weather did the rest. The sense of permanence and charm one receives in the Fine Arts is largely due to this treatment. Then, where scale and type were finer in ornamental enrichment, the scale of texture and veining was correspondingly diminished.

A great deal has been said of the glories of night illumination at the exposition. The fact should not be overlooked that the travertine tone and texture made possible the type of illumination here used. Mr. Ryan's scheme was based on semi-indirect lighting, mostly by refraction from building surfaces, and depended for success upon the warm buff color of the travertines.

It is obvious that, in appraising a result, we must take into consideration the means available for its achievement. The primary factor to be considered was that of cost. The dimensions of the project were of such magnitude that each added fraction per unit of area covered was bound to accumulate a prohibitive additional sum to the exposition's cost. Indeed, my services were first sought merely for the purpose of devising materials of sufficient quality to resist the elements during the period required and containing color pigments before applying or fabricating, in order that the expense of the otherwise necessary coats of paint might be economized.

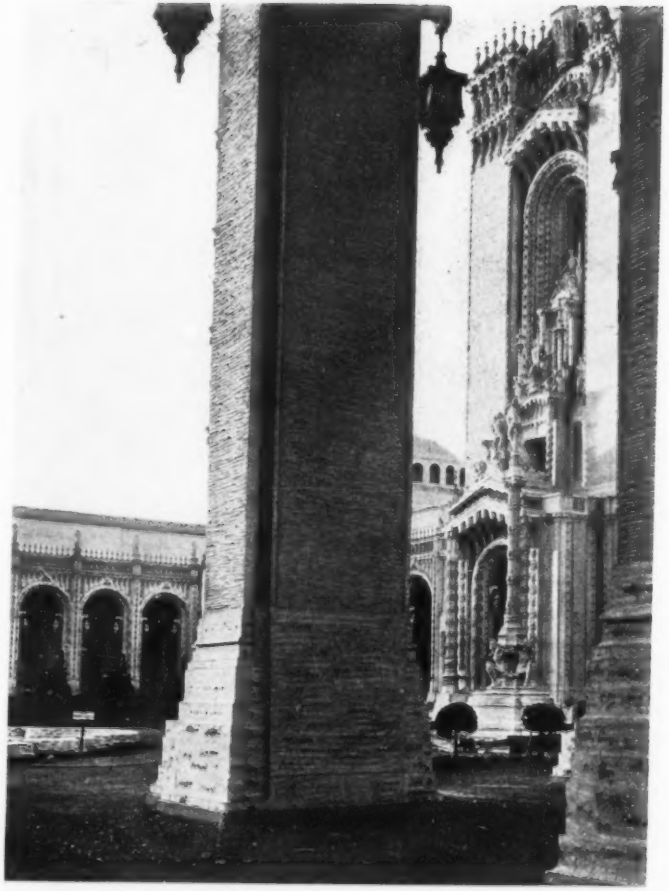
So it came about once again that necessity was the parent of ingenuity. To anyone acquainted with the applying of colored materials in plastic form it is obvious that it is difficult to obtain uniform results from the hands of the most skilled mechanics. Add to this the varying skill, or absence of it, that is bound to be employed in the rush of exposition construction and a fair idea may be obtained of the problem as it appeared to me. To produce a workmanlike travertine simulation for every detail of building surface, molding, ornament, sculpture, fountains, etc., on a giant project which must be finished within a little more than a year seemed impossible to many whose co-operation was essential. Much opposition was met with from manufacturers, contractors and mechanics, each of whom had to be educated to see the possibilities of his share of the work. The first element of this triumvirate urged the difficulty of converting a mill in part to a colored product without destroying the balance of their output (admitted that it was practical to provide a uniform colored material or series of colors). The second element feared that they would "go broke" while evolving experimentally an acceptable imitation of travertine. The third element naturally reflected the sentiment of their employers. It is gratifying to note that today all three elements are proud of the result.

The following materials were used in connection with the work under my instruction: plaster, 55,000 tons; sand, 60,000 tons; lime hydrate, 1,500 tons. To these materials were added the following colors in dry pigment form: French ochre, 398,488 pounds; raw sienna, 91,741 pounds; burnt sienna, 102,664 pounds; raw umber, 197,393 pounds; red oxide, 11,986 pounds; drop black, 360 pounds; cement green, 4,500 pounds.

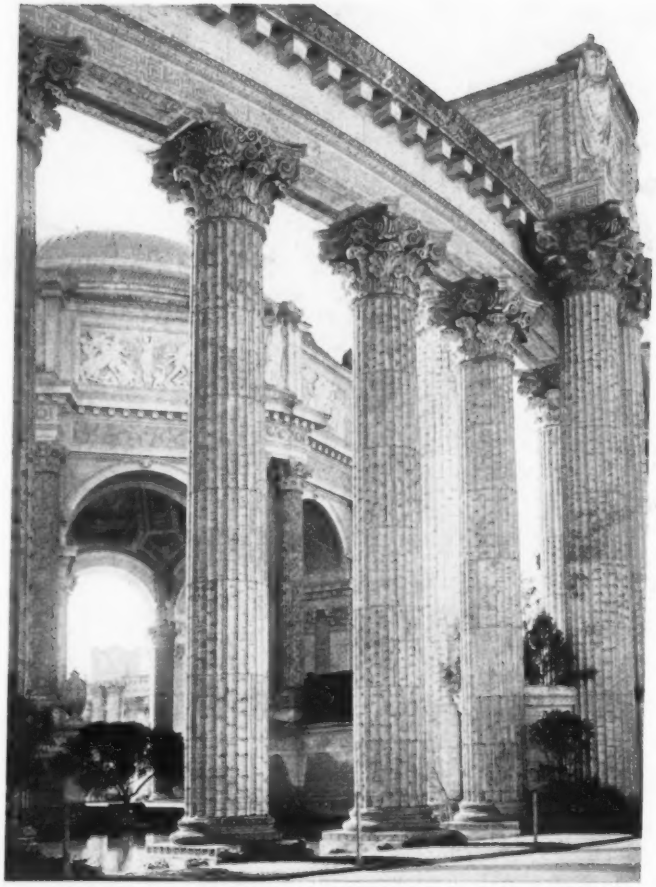
The dimensions of the project are well illustrated by the above table of quantities.

The problem was, of course, simplified by the fact that the buildings and courts were of a temporary nature, the most extended period of endurance required approximating two years and involving two winters with heavy rains. The plastered coating of walls is but three-eighths of an inch, applied on a seven-eighths wood sheathing. The sheathing is six inches wide, having two grooves to form key. All molded and ornamented surfaces were cast in "staff" (plaster and fibre), and nailed to wood furring. This method does not differ radically from former exposition con-

COURT OF ABUNDANCE BY NIGHT ILLUMINATION —PANAMA-PACIFIC EXPOSITION. SAN FRANCISCO. LOUIS C. MULLGARDT, ARCHITECT.

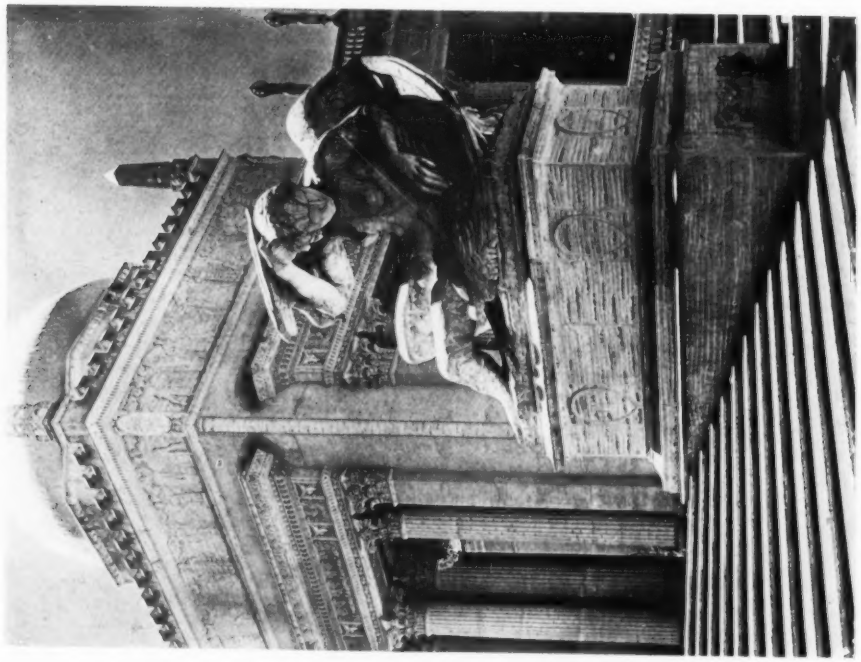


VISTA IN COURT OF AGES—PANAMA-PACIFIC EXPOSITION, SAN FRANCISCO.



DETAIL OF FINE ARTS COLONNADE—PANAMA-PACIFIC EXPOSITION, SAN FRANCISCO.

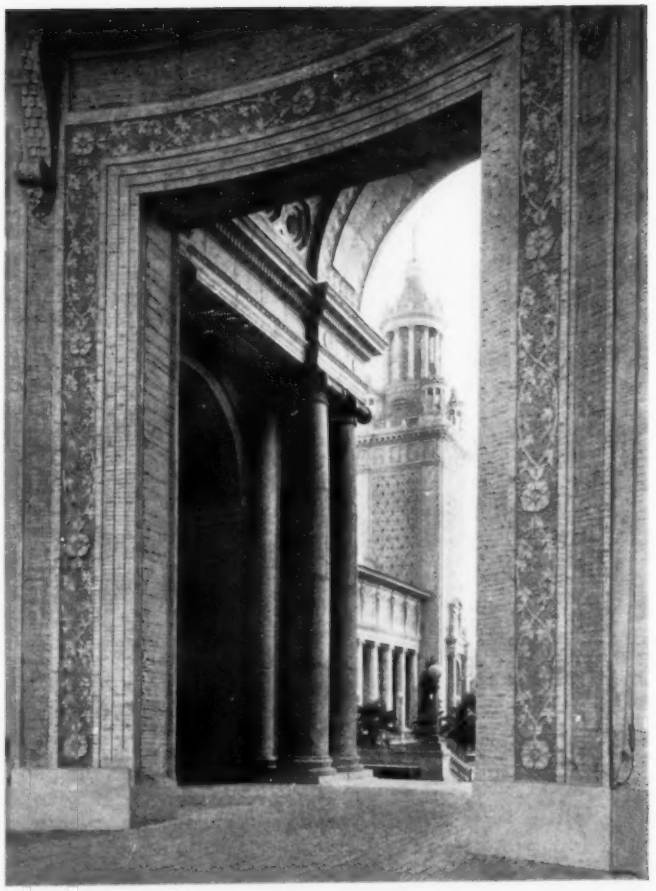
DETAIL OF COLONNADE IN COURT OF THE UNIVERSE —PANAMA-PACIFIC EXPOSITION, SAN FRANCISCO.



SCULPTURE DETAIL IN COURT OF THE UNIVERSE—PANAMA-PACIFIC EXPOSITION, SAN FRANCISCO.

SCULPTURE FLANKING TOWER OF JEWELS—PANAMA-PACIFIC EXPOSITION, SAN FRANCISCO.

CLOISTER IN COURT OF PALMS AT NIGHT—PANAMA-PACIFIC EXPOSITION, SAN FRANCISCO.



DOORWAY FROM COURT OF FOUR SEASONS TO COURT OF PALMS —PANAMA-PACIFIC EXPOSITION, SAN FRANCISCO.

struction. But we had to provide materials of seven formulas for the plain and cast surfaces, and for modeling the finished products in sculpture, also for pointing generally. There were seven standard materials supplied. Each of these contained color pigments in varying quantities. This was because the materials were subjected to different forms of use. The wall finish contained a percentage of lime—hydrate, silicate of alumina, a ground wood fibre, and three color pigments, besides the base of pure plaster. For casting, two standard materials were provided, a slow and a quick setting; from these, two others were combined for producing different blends of color in finished product. Where sculpture was not to be reproduced it was modeled direct in colored materials of a different combination that gave uniformity of color result with plasticity approaching modeling clay. In addition to the above assortment, ready-mixed materials in green, black, red and brown were provided, so that in every case where possible the columns and pilasters flanking certain portals, arches, etc., which were to accent the color note beyond that provided by the travertine, were cast with colors integral with the material. We thereby obtained some original color effects that simulated in a crude way the rarer marbles. The largest example of work of this nature is evidenced in the columns surrounding the Fine Arts rotunda, where the variegated colors have "weathered" to a fine blend of tones. I need hardly emphasize the fact that no painted surfaces could have given the mellow softness provided by the pigmented materials employed, and that we obtained a rich effect of marble and stone which each week of weather improved.

The texture was applied in wall surfaces while the finish coat of mortar was in a plastic state, by means of certain stippling and troweling processes, repeatedly applied under supervision until the desired effect had been obtained. This feature was the most difficult of control because of the constant change in the personnel of the work gangs. The color and texture to the staff and cast portions were produced by a mechanical process in casting, during which materials of three color blends were separately applied to the mold surface in rotation and in different consistency, the "set" of which was retarded in each mix so that the mass would crystallize as a unit. The texture or voids were caused by a layer of a semi-dry mix interposed between a series of veins previously poured over the mold surface and by another semi-liquid coating poured over the semi-dry which seeped through by gravity and bound the mass, at the same time automatically leaving sufficient voids or texture, the forms of which were controlled by the surface veining as by a stencil. The texture in modeled sculpture was obtained by the sculptor as he approached the built up surface, by means of special stippling.

The foregoing describes the essence of the general procedure. This travertine treatment has been referred to by architectural critics as having "made" the exposition of 1915. In its achievement I am indebted to Jules Guerin, Chief of Decoration, who would not countenance white surfaces; McKim, Mead and White, who suggested my services because of my solution of a similar problem connected with the Pennsylvania Station in New York, where the idea originated; George W. Kelham, Chief of Architecture, and the many architects of the exposition who provided a moral pressure which helped defeat opposition.

This nearly perfect Arcadia must soon disappear, to be retained as a vision of memory, except for the beggarly photographic records that may remain. But the lesson of its general color and texture is so forceful that it must soon be considered in connection with future permanent civic improvements. Its lesson of the value of texture and tone as an enhancement to the architect's every effort cannot, to my mind, be ignored. Probably the most important thing to remember is that the same and a superior quality of result can be obtained in permanent work in any climate.

SCENE PAINTING IN ARCHITECTVRE

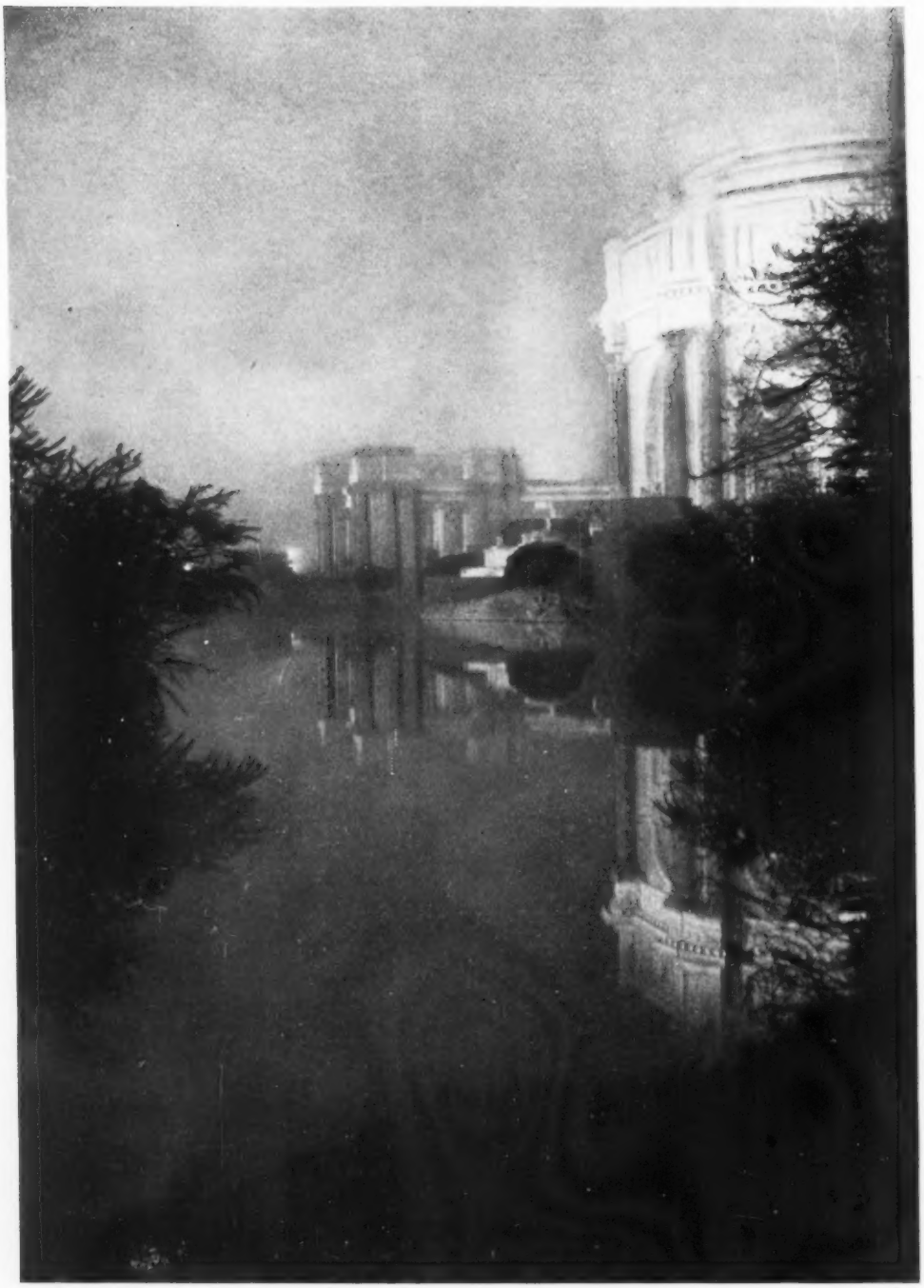
By Wm. L. Woollett

DO you remember your first night in Venice? You had planned to get your first impression by moonlight, and you arrived as you had planned, and got all of the thrills that you expected. The next morning when you opened the casement and looked down on the unlovely waters of the Grand Canal, the slippery steps of your palace were not the polished marble threshold they had been the night before; and yet now as you remember that first moonlight night you rest again serenely in the rippling silence of spreading waters. Dimly reflected towers and domes and lights and darting song-filled gondolas drift before you. The black depth of a narrow canal, broken by the doomful Bridge of Sighs, the empty plaza of St. Mark's, the idle flapping of a colored sail—all come back; and something stirs in the realms of your being, you know not what, but it's something worth while, something akin to Dante and Virgil and the Doges of Venice.

Have you lingered in the crumbling ruins of the Baths of Caracalla until dusk is overtaken by the young moon, her gracious rays distributing life in the shadow pockets, the richness of color vivifying memory's pages? The tinkle of the water in the fountain comes to the ear; rippling laughter of round-limbed bathers echoes from the polished walls; the flash of sun on the oiled and supple skin of Nubian attendants, the moving muscles of the masseurs waving palm branches in the summer air are before you—and then someone says: "Let's go home." The walls are again crumbling piles of pottery and rock, or any old thing you please, and yet as you falter in the going, the lump stays in your throat, the lump that comes when beauty too plenteous in measure knocks to your imagination.

Have you been in Cataract Gorge, back of the mountain, where the hillsides, broken and cleft with the roots of giant redwoods, rise high from black pools, where gnarled trunks and boulders in herculean labyrinth divide the waters of the cataract? Have you pierced the shaggy underbrush and stood beside the waving forms of the Bridal Veil on carpet soft and thick and green, and seen there the thin, blue, green-grey in the depths of leafy dells below, above, about you, as Gainsborough paints them? Have you listened to the plaint and murmur of trout-clear waters, pushed your fingers into the springy moss, drunk of the pool? Have you stood beside the giant madrone in this canyon and sensed the coming together of overtopping hills, where one feels himself about to be crushed between the knees of Mother Earth? Have you lain on your back near the storm of the waters and, peering aloft, spelled the names of Goth and Viking in the intertwining drooping boughs of the forest? Have you, at high-noon when the light of heaven was so scanty as scarcely to move a single shadow, there seen the hobgoblins peep and peer and scamper behind ghostly boulders? Have you seen the whole corrugated labyrinth of bouldered creek and the rough fetlocks of the encircling crags and the big trunks with their twisting roots and the little stones, everything about you covered with a mantle of soft green? And did you not in the rhythmic silence bend to the mystery of the place and understand why no bird-twitter challenged the pelting noises of the waterfall?

Have you been in the Greek Theatre of Berkeley with Margaret Anglin and Electra? Do you remember the cadence, when, with a majestic grace and rhythmic coming down, two youths bearing gifts of flowers attend a sacrifice to the gods, and on either side and to the fore were others of lesser mien also bearing garlands; these four enjoined with drooping sprays descend the broad steps



PALACE OF FINE ARTS, PANAMA-PACIFIC EXPOSITION,
SAN FRANCISCO. BERNARD MAYBECK, ARCHITECT.

of the temple to the green before the altar, their steps in unison, and accompanying music seeming to emanate from a vision of rhythm and color? The deep shadow of the temple portal is behind; beside the portal the black shapes of noble-limbed human, immobile statues stand; on either flank are the serried ranks of columns, creamy and mellowing as time alone mellows purest marble; below, the altar and the green turf. Over all the pale moon vests with unnatural light a scene in which Electra lives again.

Have you recognized, in the abstract qualities of light and of shadow, of form, of music, the handmaidens of the artist? Yes, a thousand times, yes! In these simple and common experiences we discern not only the principle and influence of abstract qualities when harmoniously combined as a setting for the display of an idea, or emotion, but we are bound to realize also that "scene painting" is a common habit of the mind. Having seen visions and dreamed dreams, it is not necessary to dwell on the value of abstractions, or to emphasize the fact that reservoirs of vital forces of suggestion dwell, awaiting the call of the imagination, in every form and color combination and sequence. Each rich, ennobling and beautiful thought comes not of itself, fully grown from the loins of self, but is born of a panoply of abstractions, which are derived from and incited by the real in some phase. Thus, old and faded Venice in the shadows of the night, ruined walls, and perishable modern theatre trappings, and simple nature are equally efficient in setting the imagination aflame. Scene-painting, then, is a large term and may well include for the moment the entire field in which the mind appropriates abstract values as a stimulant for the imagination. In this conception of scene-painting we have a first hand knowledge of the power of suggestion inherent in the qualities of things of form and color; the power of historical association, of things of familiar use, of things of ugliness or beauty, to suggest in the abstract complete thoughts, emotions, pictures, stories. Taken in this sense, exposition architecture may be deemed to be in the category of "scene-painting."

Ordinarily, architecture has a double duty to perform; it must satisfy the practical, and it must be beautiful, suggestive, fill the aesthetic requirements. In exposition architecture, however, the architect is at play; his chief mission is to please, to stimulate; the practical is at least in abeyance. If one will but enter into the "spirit" of the play, the pageant offered to the imagination by the Panama-Pacific International Exposition becomes redolent with peculiar beauties. This spirit informs you that these palaces are real in the same way that streets, lanes, gardens, fences are real in a real play on the stage, and this California exposition scene is no "make-believe." It is a real play.

Of all the sights displayed at night, the dome-crowned Palace of Fine Arts, a vast opal-like vision in a jewelled setting of reflected lights, claims your thoughts and sets aglow the torches of memory. Do you see those great columns in groups of different size and height, and the masses of towering masonry above them, the marble and the bas-reliefs? They make you think of brave deeds and a civilization of opulence and power, aristocratic and barbaric, almost Moorish. And do you see the color on the towering piers and terraces and steps that flushes softly radiant, and the banners in the breeze, and steeds with wings that fly and claim you for romps in far Arcadia; the massive chunks of broken cornices, the syncopated high and low of the sky lines, the deep shadows where glow the embers of altar fires and broad steps where swept just now the trailing robes of Lacollus and his tribe, yielding a harvest of color pictures, rich in purples and ermine and lemon-yellow and gold? There a peacock stands and then with measured tread meanders through the lofty portals that lose themselves in the deep of the night. Across the water a hundred-oared galley has come and gone, and now you know again silence, solid and unbroken, save for the water tremulous and riffling through the reeds. The lily pads rustle and smite each other in tiny acclaim while you wait for the dream to go on.

This "dream business" is the magic of suggestion that the architect of the Fine

Arts Building of the Exposition has succeeded in bringing to his assistance. You who have dreamed in the Grand Canal, you who have worshipped in the ruins of Rome, and have painted scenes for yourself in many lands, and who know the stage, you understand this language; and though you know that this palace is only plaster, that these tripods where smoke the embers of vestal fires are only wood, that there was no hundred-oared galley, no stirring of the waters of the pool, you are grateful to the author of such a stimulating picture.

The Fine Arts group of the Panama-Pacific International Exposition must then be viewed purely as a piece of "scene-painting." Masterful and a "decoy" for beautiful dreams, it marks an epoch in exposition architecture. It is the kind of thing, in spirit and method, that ought to dominate in exposition work. This group and the Mullgardt Court are the only elements in the exposition that unmistakably say, "This is a dream. The dream I dream is true and you are part of the dream," and the author of the dream knows that he was dreaming and that the dream has come true.

Such is the aspirational, individual quality of this work that no one for an instant believes that antiquity has more than furnished inspiration for the design, no one forgets for an instant that it is merely a dream of perishable material, and not amenable to the standards of permanent buildings. As an effect in color, it is explicit, intelligent, and a successful effort in the realm of abstract art. That the canons of good architecture are not satisfied, that precedent and propriety, and the standards of good taste have in minor details been scandalized, that color has done its worst and its best all in one, that as a permanent work of architecture this group of buildings would be impossible is totally beside the point. That they are expositional, that they attract, inspire and uplift, gratify and please the public, the artist, the critic, is the real test, and as Mr. Hornbostle, the architect, is reported to have said at a dinner of the San Francisco Chapter of the American Institute of Architects, "If the camera shots taken by the public within the exposition grounds could be seen, you would probably find that there were more pictures of the Fine Arts group than of any other portion. Gentlemen, I take off my hat to Mr. Maybeck."

Personal Reminiscences of CHARLES·FOLLEN·McKIM

By Glenn Brown

McKim and The American Institute of Architects

IN 1901 the Institute, although of dignified age and high ideals, had not attained sufficient prominence for ambitious men eagerly to seek its presidency.

At the Buffalo Convention, the nominating committee, with the intention of making the Institute of greater public service, determined to secure a man whose name would give lustre to the association, add to its standing both with artists and with the public and lead it to a social prestige it did not have.

Charles Follen McKim, who stood alone as the member representing the highest type in ethics, design and social position, was, without being consulted, nominated and elected president.

His friends persistently asserted that he would never accept an onerous office, adding nothing to his reputation, tendered to him for the purpose of increasing the prestige of the Institute. These repeated assertions made me, whose duty it was to notify him of the election, nervous as to the result, and diplomatic in seeking the most effective way to secure his acceptance.

A letter of notification, we felt certain, would meet with a prompt declination of an office which had been thrust upon him without a hint of our intentions or a knowledge of his inclinations. A personal notification was considered safest. I called at his office in New York with hesitation, knowing the demands would be heavy on his valuable time, and with anxiety, as I felt his acceptance meant so much to the future welfare of the association. After running the usual gauntlet of the big New York office, held up by the office boy, investigated by the head attendant and approved by the general manager, feeling meek and insignificant I finally reached the sanctuary of McKim.

His friendly and affable reception restored my lost dignity and after preliminary greetings, McKim was informed of his election as president of the Institute at the Buffalo Convention. Doubt, astonishment and apprehension were expressed in his face as he said:

"You can't be in earnest, you must be joking."

"We are very much in earnest," I replied. "Mr. President, the convention was unanimous in selecting you as the man best representing the Institute and the one who can do most to make its work of great public service."

"I am not fitted for the office," he stated. "I have taken no part in the Institute's work for years and know very few of its members—I could never preside over a convention. I know I am not suited for a presiding officer."

Arguments were then presented showing how we needed a man of his character and ability in the campaign for better government architecture, for the future development of Washington and for the education of the public in the fine arts, and impressed upon him the public service he could, in this position, render his country. Mr. William R. Mead, who had been called into the conference, backed these arguments, telling him he was just the man for the place, saying he should not give way to his inclinations, but should accept the position because of the benefit he could render both the profession and the people. What he feared most was evidently the necessity of presiding over large meetings. We convinced him that this was the least important of a president's duties. Finally, being assured that he

might, through the Institute, be instrumental in advancing the fine arts, he yielded to our arguments and accepted the position with diffidence, still expressing doubts as to his fitness.

The name of the society was at this time little known outside of the profession. McKim's first ambition was to interest the people in its ideals and to secure the cooperation of influential men in its efforts for the public welfare; his next step was to secure the confidence and good will of government officials. He endeavored to impress both the public and the government with the value of artistic buildings and monuments as records to future generations of our culture and civilization and educate the public to an appreciation of the usefulness of art and beauty in the refinement and culture of living generations.

He laid his plans to prove the Institute's aims meritorious and unselfish and to convince the people that the association was worthy of public and governmental confidence. He immediately began, in his charmingly diffident, persistent, practical way, to secure the desired results. Nothing was too insignificant to be overlooked or too large to be undertaken if it was a means toward attaining his ends.

A brief description of two occurrences will illustrate McKim's way.

Permanent offices or headquarters for the Institute had been under discussion by the officers and members of the association for thirty years.

While it was felt that a permanent home would be of material advantage, nothing had been accomplished toward securing it, although many efforts had been made to raise a fund for this purpose. The Octagon, built in 1800, one of the most attractive houses of the period remaining in the country, was considered desirable headquarters. A short time after McKim became president he said one afternoon:

"We need a recognized home to give us dignity and standing. The Octagon is an ideal house for this purpose. Don't you think the majority of the members would like it? How much do the owners ask for it?"

"I believe the members would unanimously approve the Octagon as their future home," the answer was; "although the owners have fixed no price, I believe we can get it for thirty thousand dollars."

"Make them an offer," he replied, "of thirty thousand dollars, ten thousand to be paid in cash upon their showing a clear title."

"But, Mr. McKim," I said, "we have only five hundred dollars in the treasury."

"I will see," he replied, "that you get the ten thousand cash payment. If I cannot get others to join me, I will send you my check for the amount as soon as they show a clear title and are ready for the first payment."

The offer was made the next day. It was accepted and a clear title was furnished in about two weeks; the cash payment was made, and the Octagon became the property of the Institute.

This transaction demonstrated McKim's influence with his brother architects. He found it necessary only to tell five of the strongest architectural firms that the Institute had purchased the Octagon, say he wanted two thousand dollars each from them as a first payment, and I had the checks in my hands within ten days.

It may be noted that the same men had been urged time and again, without effect, to subscribe a few hundred dollars for the purchase of this building. The Octagon soon became a show place, an interesting object of pilgrimage for the prominent in social and political life, due to McKim's constant praising of its artistic beauty, historic association and architectural interest.

While McKim had a horror of meaningless publicity and ordinary newspaper notoriety, a constant bragging over trifles, he thoroughly appreciated the importance of bringing the name of the Institute and what it desired to accomplish effectively before those whose interest would secure results.

To accomplish this end no labor was too great to impose upon himself or to demand of his assistants and his friends.

What is known as the McKim Dinner of the Institute well illustrates his

watchfulness over details and infinite pains in securing his ends.

The preparation for this dinner began seven months before the date fixed for the banquet. It was intended to inaugurate with this event an annual dinner by the American Institute of Architects given to enlighten the public on the fine arts. The objects of the first dinner were to interest influential men of the country in future government structures and to secure a permanent foundation for the American Academy in Rome to offer an opportunity for post graduate study to the brightest of our young architects, sculptors and painters.

He determined to bring together at this banquet the most brilliant and capable men eminent in art, literature, finance, science and industrial arts and to secure the attendance of leaders in the executive and legislative departments of the government.

Before he began his campaign, he determined to secure the sympathy and help of Elihu Root and Nicholas Murray Butler. McKim's plans were unfolded to them at a private dinner when he aroused their interest and secured their support, which meant months of active cooperation. With their assistance, together with his personal efforts, McKim proceeded to arouse the interest and secure the assistance of prominent men in government and private circles. He first obtained the aid of President Roosevelt, the Ambassador of France, John Hay, Secretary of State, in official life; then he proceeded to get the help of, among others, Mr. J. P. Morgan, of the financial world; Saint Gaudens, representing sculpture; Frank Millet, in mural decoration; Mr. A. J. Cassatt, the railroad executive, and Cardinal Gibbons, the church prelate.

President Roosevelt, Senator Root, Nicholas Murrary Butler, Ambassador Jusserand, Saint Gaudens, LaFarge and Speaker Cannon promised to speak.

The names of the noted guests and a list of the principal speakers, together with a carefully prepared letter which outlined the objects of the dinner, were sent to all others whose interest and cooperation we wished to secure. We found no difficulty, after this preliminary preparation, in obtaining acceptances from the sixty-five individuals we desired for the head table. Each was selected as the leader in his art, industry or profession or in a branch of the government service.

The best hotel in Washington at that time was the Arlington. The painting and decorations of its dining-room did not satisfy McKim, because of their want of artistic expression. Frank Millet, ever ready to help, was called in, and he devised a complete scheme of decoration for the room, so that it might be fitting the artistic dignity of the occasion. Refitting and decorating a large hall meant zealous day and night work for Millet and myself, as well as for the decorators. Mrs. Roosevelt having been invited, it was thought necessary at the last minute to erect a private box to seat about fifty people. This was built, decorated and placed at the disposition of the Lady of the White House and her friends.

The room, as completed, was dignified and chaste, the walls were covered with unbleached, pleated and draped cotton. The cream color of the cotton and the shadow of the folds gave a warm, soft, grey background. Green vines, palms, a trophy of flags and the flowers on the tables furnished color and completed a harmonious decoration.

McKim with personal solicitude saw that the invitation cards were of the highest type of the engraver's art. The table plan was printed in a dignified, attractive way, based upon a similar plan of an important dinner given by the Royal Institute of British Architects. McKim had special seals designed under his direction from which steel dies were cut; from these embossed prints were made on the invitation cards and table plan. Apt quotations and apt descriptive paragraphs were selected to be printed on the table plan to accompany each speaker's toast.

Seating sixty-five distinguished guests, among whom were the most prominent officials of this and other countries, and the most distinguished representatives of the arts and industries of the United

CHARLES FOLLEN McKIM.

States, was a matter of serious study to McKim.

The precedence of ambassadors, Cabinet officers, Senators and others are not settled questions in this country, as they are in Europe. To avoid mistakes, McKim directed me to obtain from the Assistant Secretary of State a list showing the relative importance of each individual official at ceremonial functions. Upon consultation with other officials we found a decided difference of opinion as to the rank and precedence demanded in government positions. McKim found it necessary to decide whether officials should precede men equally eminent in other walks of life. Was Saint Gaudens more important than a Senator? Was Mr. Morgan, the financier, equal or superior in standing to the Speaker of the House? Should Mr. Cassatt, the railroad executive, precede a general in the Army? Was Cardinal Gibbons, the religious prelate, superior to a secular ambassador?

One morning, about ten o'clock, McKim and I sat down to locate the seats of the guests on the dinner plan, in order to send them to the printer. After gathering all the information available and considering the suggestions made by those in and out of office, we worked without intermission until the afternoon, taking a bite for luncheon, with the plan before us, weighing the relative importance and proper place for each individual guest. At five o'clock it was necessary for McKim to leave Washington to meet an engagement in Boston the next morning.

When the time came for him to leave, the seating was still more or less chaotic, and I was asked to get on the train and go as far as Baltimore with him. A state room was secured and the shifting of names and places resumed. The arrangement was still unsettled at Baltimore and I was informed that I could get off at Philadelphia. When we reached that city the seating was nearer completion but still not satisfactory. I telegraphed that I would not be home that night and went on to New York. Just before reaching New York the table plan was completed, and officials and leading men in other walks of life were placed in what McKim considered their proper seats at the head table. I returned to Washington on the midnight train and McKim went on to Boston.

The question of music to delight the ear and food to tempt the palate was not ignored. McKim was a connoisseur both in music and in viands for the table. He took pains to get the best voices for a song and the best instrumental music to be found in Washington for the orchestra, selecting both the song and the music so as to emphasize the speeches and fit into the spirit of the toasts.

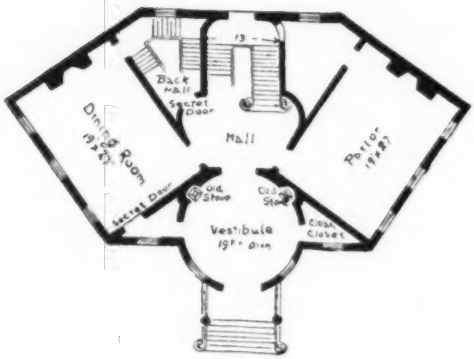
The menu, while limited in number of dishes, represented the best to be secured from the Chesapeake Bay and its tributaries, such as terrapin, canvas-back duck and Smithfield ham served to tempt the eye and cooked to tickle the palate.

McKim personally chartered a special train from New York to Washington on which he brought the speakers and guests from New York, Baltimore and Philadelphia. This train returned to New York after the banquet.

Entering the banquet hall the guests must have been pleasurably inspired by the room with its warm cream-grey walls, decorated with palms springing from green plaques, which bore the names of the thirty chapters of the Institute—a room in which evergreen festoons and moldings emphasized architectural lines. Back of the president's chair was the great seal of the Institute and on the western wall, flanked by trophies of State flags, was placed the initials of the association.

The guests' table, raised two feet from the floor, encircled three sides of the room. Flowers decorated the tables, lending the necessary color to give the room its charming effect. After the body of the members were seated, other members sought the guests in the reception room to whom they had been assigned. A procession was formed and the body marched into the banquet hall, the members at the tables standing until the guests were seated.

When Mrs. Roosevelt and the ladies entered her private box the men arose



VIEW AND FIRST FLOOR PLAN OF THE OCTAGON, WASHINGTON, D. C.

and the male quartet sang "Hail to the Fairest." The president of the Institute then gave the toast "To the gracious lady whose presence is an inspiration because her thought is ever on the things that are true."

The Institute, in this demonstration, wished to show its appreciation of Mrs. Roosevelt's sympathy and assistance in carrying forward the Park Commission plans for Washington and in the restoration of the White House to its former beauty and dignity.

President Roosevelt entered just before the speaking, as the orchestra played the National Anthem; he responded to the toast "The fathers of the Republic who established liberty and wise laws and left us also noble architecture nobly placed."

Roosevelt, after speaking of the general character of our executive and legislative departments, called attention to the importance of artistic and harmonious expression in our architecture, parks, statues and decorations, as leading to the culture and refinement of the people. Upon this occasion Roosevelt pledged himself publicly for the first time to support the execution of the Park Commission plan for the development of Washington, a pledge which he faithfully and strenuously kept. In closing his address, he said:

"The only way in which we can hope to have artistic work done by the Nation, State or municipality, is to have such a growth of popular sentiment as will render it incumbent upon successive administrations or successive legislative bodies to carry out steadily a plan chosen for them, worked out for them, by such a body of men as that gathered here this evening."

The speeches made upon this occasion were notable for the character of the speakers, for the six months allowed for preparation and the evident thought each speaker had given the topic assigned him. The addresses were published by the Institute in pamphlet form in 1905.

Ambassador Jules Jusserand and Nicholas Murray Butler spoke on "The Place of Art in Civilization," while "Art and Religion" was the topic of Cardinal Gibbons.

Mr. Elihu Root, of whom it is not too much to say that no one has so steadily and sympathetically and with such ability assisted our profession toward the highest expression of architectural ideals, spoke on "The Simple Life." In his address he called attention to the efforts of early Presidents to secure the best in art by seeking the ablest men from this country and abroad. The speech was a masterpiece in thought, leading the hearers to appreciate the moral value of beauty in the culture of the public.

John LaFarge answered the toast to the painters, and Augustus Saint Gaudens answered the toast to the sculptors.

Justice Harlan, of the Supreme Court, gave an address on the "Higher Law."

Speaker Cannon, who had persistently opposed all suggestions made by the Institute and was looked upon as the principal obstacle to the improvement of government fine arts, when he arose to speak, was greeted by the members standing, with cheers and the song "For He's a Jolly Good Fellow." Answering to the toast "Architecture and the Appropriations," he said, "I am proud of what you architects have accomplished. Sometimes I have said things that many of you did not approve. . . . I have heard that there are architects and architects. All of them are not perfect, yet progress has been made."

The members looked upon this speech as an encouragement and a harbinger of future success.

It may be asked, Why spend so much thought, time and labor on the details of a mere social gathering? McKim believed in giving the Institute a social as well as an artistic standing in the country, knowing the effective power of the social world in gaining its ends, and wishing to direct its energies into work for the ideals of the Institute. He wished to impress upon the leaders in the industrial, literary and official world, the importance and value of the fine arts as an element in the cultivation and elevation of the masses.

He determined to make the occasion

one that would not be forgotten and the thought of which would inspire all to future efforts in the development of the fine arts. The occasion was to be so notable that nothing would offend the taste of the artist, jar the ear of the musician, vex the mind of the literary man, and still be sumptuous enough to satisfy the wealthy and critical.

The importance of government expression in the fine arts, in which the capital city was included, and the great value of placing the American Academy in Rome, a post graduate school for artists, on a firm basis, were the topics impressed upon the audience by the speakers.

This was the occasion when Mr. Root announced the gift of one hundred thousand dollars each by J. P. Morgan and Henry Walters to the Academy in Rome. After these gifts were announced the loving cup, starting with Mr. Morgan, was passed along the head table. As immediate result of this banquet were gifts of six hundred thousand dollars to the American Academy in Rome. The banquet made the Institute known to the distinguished and influential people throughout the United States and it was a great factor in securing the development of the Park Commission plan. After this event we found it easy to secure attention to our demands. The Institute's success in preventing the location of the Agriculture Building in the center of the Mall, where it would have cut off the vista from the Capitol to the Washington Monument, the placing of the Grant Monument in the Ellipse, where it would have destroyed the beautiful view down the river, and the location of the Lincoln Memorial where it would become an addendum to the Pennsylvania Station, was due largely to the strength of friends made by this dinner. The acquaintance secured by the dinner was a factor in preventing the erection of the House and Senate office buildings and the extension of the Capitol without a competent architect. Improvement in the practice of the Supervising Architect's office and securing the Fine Arts Commission may be credited to the interest aroused on this occasion.

It is an event that is still remembered and is still working for good through those who were present.

McKim from the time he became president took an active and controlling part in the good work of the association.

He abhorred devoting the time of conventions to changes in by-laws which did nothing to advance or better the association or serve the public and he opposed formulating rules and regulations to govern the conduct of members, feeling that it belittled the association, as professional men of standing did not require regulation of their conduct.

His efforts were all directed to interest the public in the fine arts, to improve the standards of education, to prevent the government and municipalities from erecting crude and inartistic monuments or buildings and destroying beautiful natural scenery.

McKim was retiring and seldom took an apparent active part in the large meetings, and for this reason a larger part of the membership failed, I believe, to appreciate the great work he did for the Institute and, through it, for the country. He worked tirelessly and effectively through his subordinates and his committees, allowing no rest for them or himself. He called to his assistance such men as Elihu Root, Frank Millet, Augustus Saint Gaudens, Nicholas Murray Butler and, upon occasion, Theodore Roosevelt and William H. Taft, and always found them ready to give time and thought to any cause he assured them was good.

His power to interest and secure the cooperation and active assistance of prominent men was unsurpassed. He, with the secretary, Frank Millet, and Augustus Saint Gaudens, many times worked through the early hours of the night until the morning hours, giving careful consideration to Institute efforts for the advancement of fine arts, for it was always architecture, painting, sculpture and landscape that he considered.

SIX ETCHINGS OF BROOKLYN BRIDGE

By Henri De Ville
With Text by Mildred Stapley

WANDER for an hour along lower Broadway and you soon feel how consciously fantastic its tall buildings are. From the Pulitzer, first of its class, to the new Woolworth, every business structure is an avowed effort to go higher; height first and beauty afterwards, if possible. In many instances, fortunately, it has been possible; and yet after an hour's straining gaze up at these beautiful facades one begins to feel a certain monotony in their appeal. All seem to be shouting "The engineer gave me my astounding steel skeleton and the architect draped it. I am the new New York. I have swept away nearly every trace of thirty years ago."

This is the moment for turning due east along Frankfort Street where the splendid masonry arches of Brooklyn Bridge give the lie to the merely stone-draped steel monsters. Soon you reach the open water front and come upon a life so different from that of Broadway that you might have traveled miles instead of minutes to reach it. Here in its old-fashioned garb the New York of early years dares still to exist. Here there is no deliberate aim at being conspicuous, no feverish thronging; yet all is busy enough to bespeak a thriving seaport. Powerful looking men load and unload waiting ships, and carts gay with tropic fruits pass by; for this is where the West Indian and South American vessels disgorge their treasure.

Here the low brick dwellings of generations ago house homely trades that are spurned of Broadway and that could exist only where boats and their crews are forever coming and going. Look at this corner house unapproachable because of the heavy iron chains and anchors heaped against it; and there is one with its whole front picturesquely festooned with rope—thin rope, thick rope, giant rope. The next is dedicated to pulleys—a huge three-foot pulley outside and others of ever-decreasing size in the window. Even the candy-store whose wares outvie the tropic fruits in brilliancy is germane to the locality, for these powerful stevedores and truckmen are merely big boys to whose palate pink gum-drops and lollypops are still dear. Arriving in their neighborhood at noon one finds every mother's son of them concerned in reducing an enormous half-pie to a slender crescent. Never is less than half a pie bought, and never does a consumer attack it in any other way than from the center rimwards. Your pie-eater's gaze is sure to be fixed, as he stands lunching, on the free side of South Street where the Atlantic (even though it *is* misnamed the East River) hurries by. He loves that open prospect which Broadway cannot give; and he loves, too, that other wonder that eclipses Broadway's soaring towers—the mighty cable-hung bridge high above, stretching far away in the distance; full itself of life and movement, yet brooding eternally over small transitory life of the water's edge.

There are still a few active members of the little South Street world who remember when Brooklyn Bridge was not; many more who came there when it was being built. Such are only too glad to detail the vicissitudes of its construction in picturesque but inimitable vernacular for an enquiring younger generation. But the younger generation is not often enquiring; Brooklyn Bridge was there when they came upon the metropolitan scene and they accept it, in their unimaginative way, as a fixed part of New York coeval almost with Manhattan Island itself. If interested at all in bridges, it is in those newer spans farther up the river, whose "opening day" was marked by special exercises in their respective schools (for are not special exercises always an unforgettable break in rou-

tine?). All too infrequently, therefore, do the old-timers get an appreciative audience and more's the pity, for they are well worth encouraging. Pick out some keen-eyed grizzled chap at noon time, wait till he has finished demolishing his half-pie (for no matter what he may have eaten within doors, this much will be eaten on the street) and ask him innocently if he can tell you when Brooklyn Bridge was finished. This will start him. Yes, he does know when it was finished and when it was begun and many things that happened in the interim.

Well does he remember the elder Roebling, who did the first surveying, prepared the first estimates, and started the actual work. Roebling often said that should he not live to finish this daring undertaking his son would be able to carry it on alone. Your narrator, though not actually a sailor, is cousin to those of the sea and smacks of their superstitiousness, so he scents in this speech the father's prescience that the Brooklyn Bridge would be his death; and true enough, within a year as he stood by the spare ferry slip on the Brooklyn side figuring out where the caisson was to be sunk, a barge crashed into the pier, injuring him fatally. Within a fortnight the great bridge builder was dead.

It was a frightful set-back; but time showed that the father had not over-estimated his son's abilities and the work went steadily on. But if Col. Washington Roebling was to have the fame of completing that wondrous mid-air highway that his father had started, he too must pay dear for the honor. One day, it was in December, 1870, a careless workman away down under the river, set a candle on a ledge close below the caulked and pitched roof of the Brooklyn caisson. The roof caught fire and, as all the draught was from within outward, it was burning a long time up through the fifteen-foot roof before anyone discovered it. They had finally to flood the caisson, thus undoing the painful work of months, before they extinguished it: but Washington Roebling in the meanwhile had spent too many frantic hours down there; a half hour after he came up—even before he reached home—he was partially paralyzed. Thenceforth he was an invalid; but he worked on unflinchingly through years of exposure and anxiety, constructing the Great Bridge.

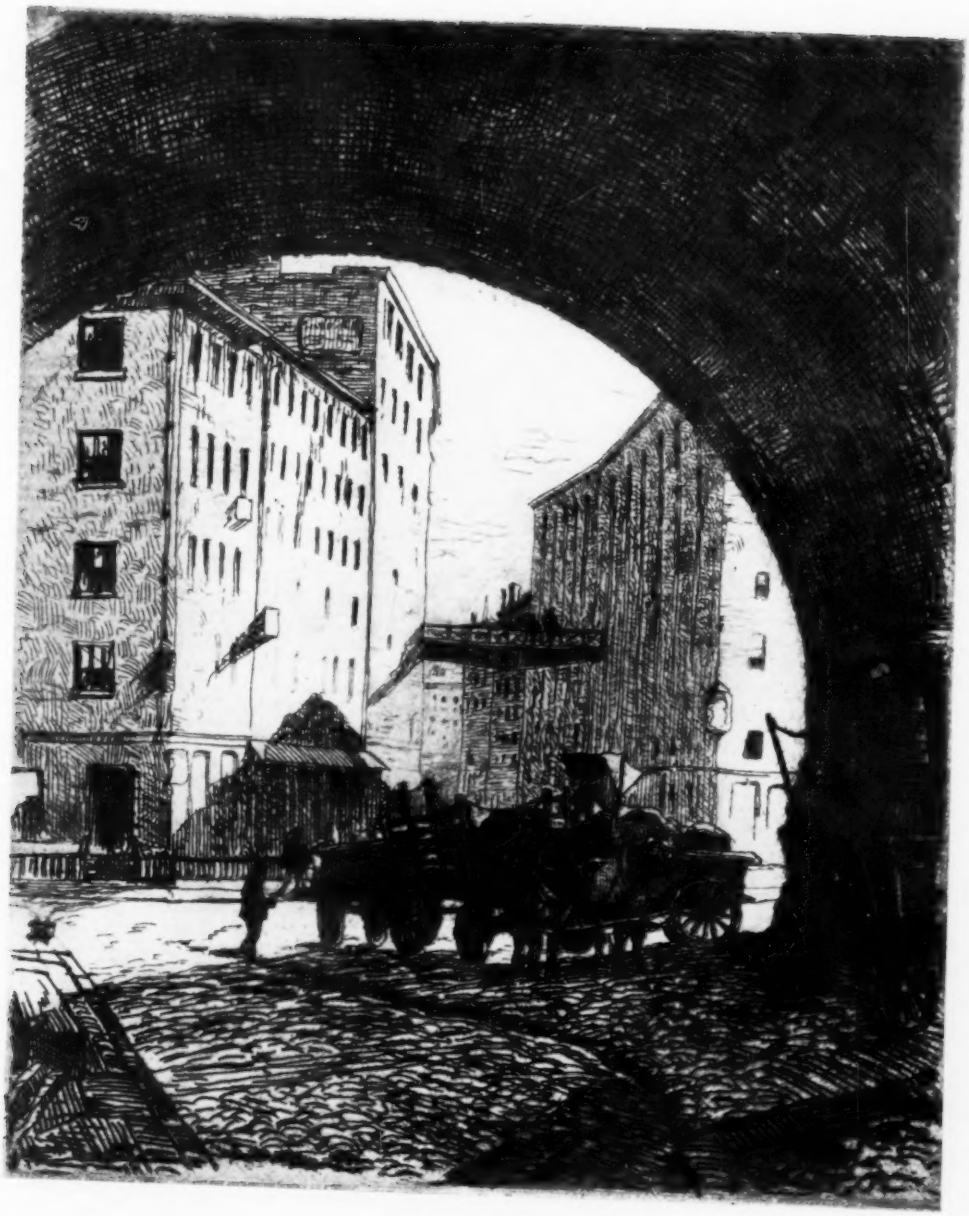
"But he lived to complete it?" you innocently venture to hope.

Live to complete it? Ay, he lived to go down in the Titanic. Some people, you are told severely, were so interested in the useless society "swells" saved from that ill-fated vessel that they never noticed that the engineer who had built the first bridge, the Great Bridge, went down. Your man of the island's edge has socialistic tendencies. His fine scorn makes you feel very small and mean, but was worth risking nevertheless.

Do you wonder, audibly, how high the bridge is? He is ready with figures. The main span is a hundred and thirty-five feet above the water, and the cable piers run a good distance above this again, as well as nearly eighty feet below water. Considering that there was no end of sewage abominations and ancient tan pits and a sunken dock of generations ago to be removed before the piers could be started, you ought to respect these splendid bits of masonry construction. Look at them rising up there—massive, grim, granite towers, pierced each by two graceful slender pointed arches set against the very heaven itself. Ay, the masonry's the thing, you are told. Other bridges have gone up since—there they are, yonder—strong enough, no doubt, but they don't *look* it as this one does. When you've seen a granite tower like that go up, stone upon stone, you know it is going to last!

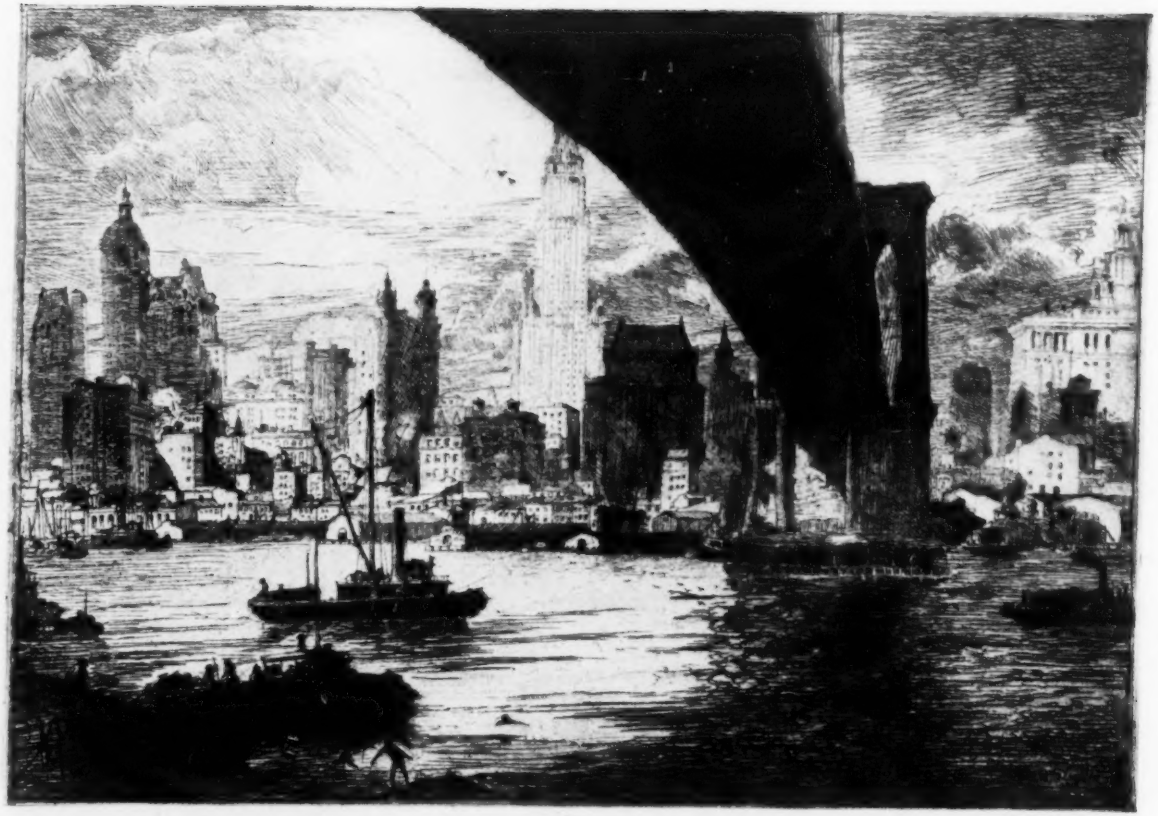
And the listener realizes that this simple pie-consumer is merely uttering a world-old truth. Masonry is monumental, as no other expression of the builder's art is; and above all is this true of granite masonry. No steel bridge over the East River makes quite the same appeal. There will always be a deliberate preference for this first-built in the minds of those to whom tradition is a vital factor. Over our rapidly modernizing city of steel its mighty stone towers and approaches send a strange haunting breath of medieval Europe that cannot leave the imagination untouched.

Then, too, there is the appeal of that natural concomitant of masonry archi-

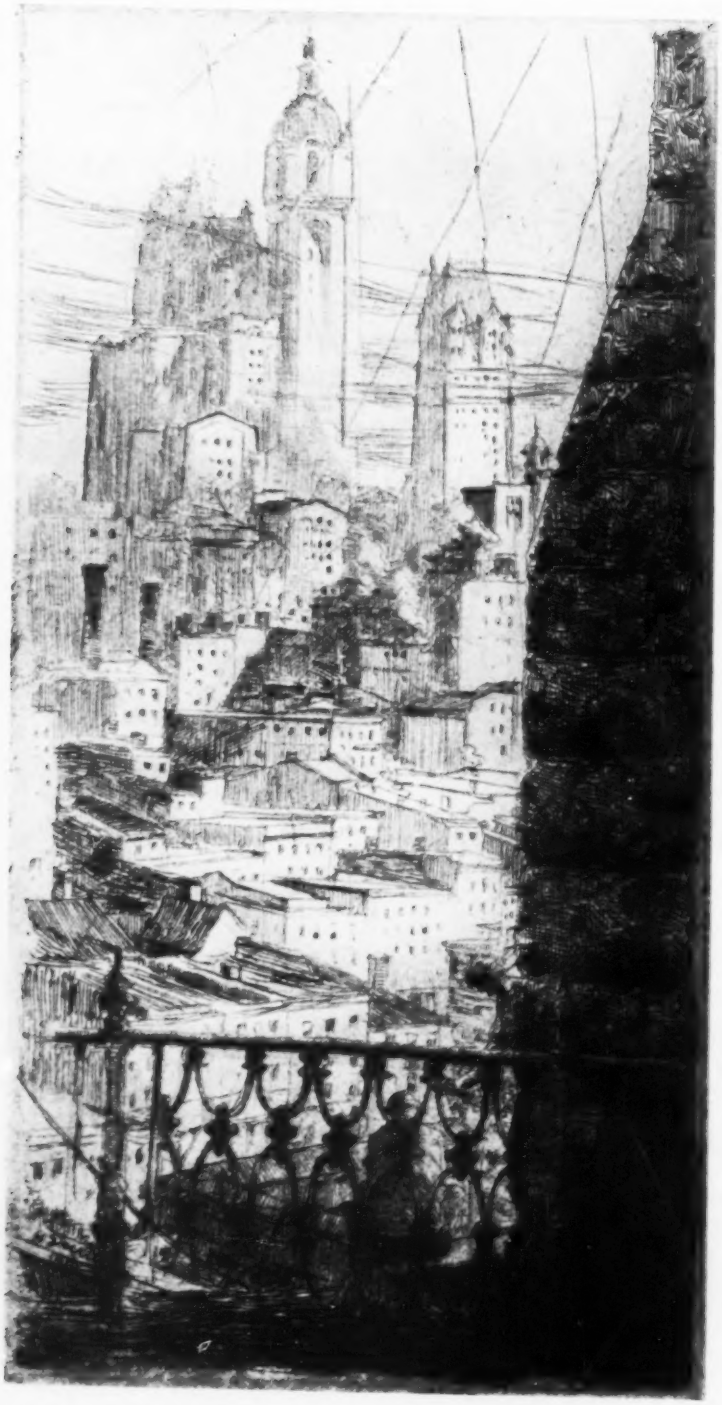


THE LUNCH HOUR UNDER CLIFF STREET ARCH.

FERRY ALTERATIONS.

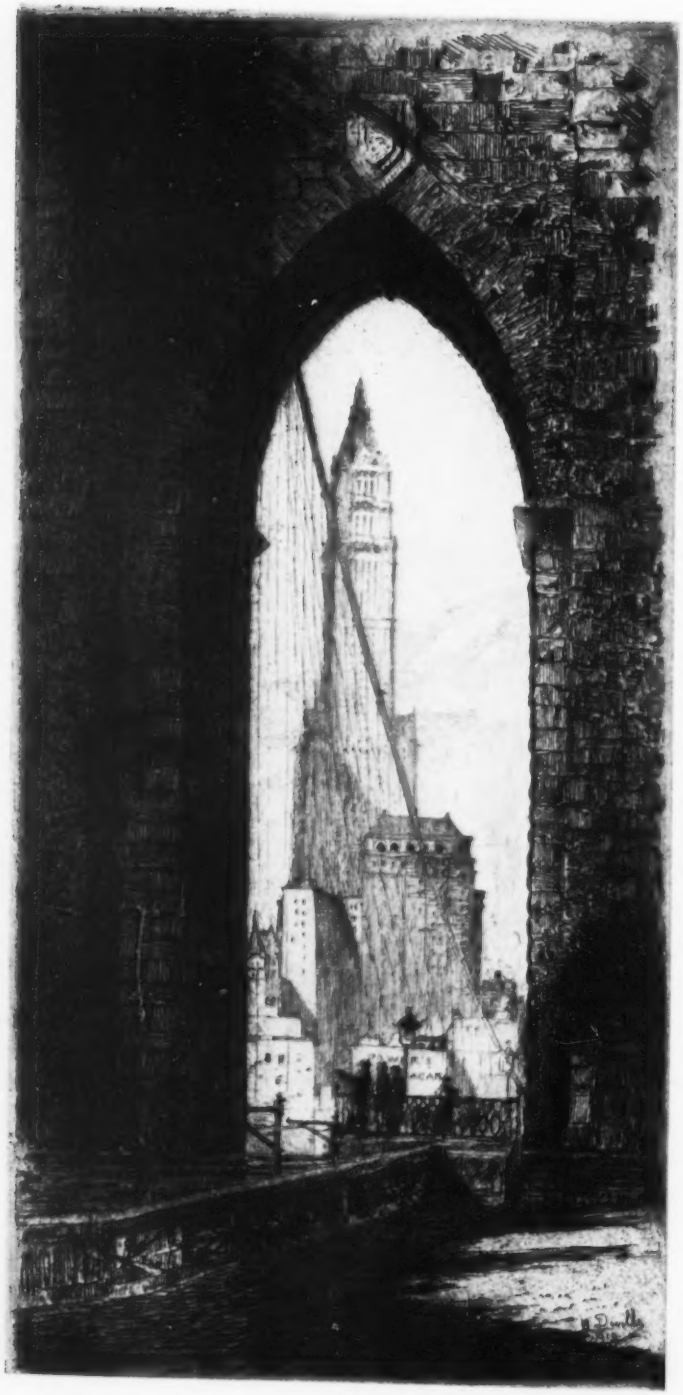


THE EAST RIVER.



A GLIMPSE OF NEW YORK.

THE BROOKLYN SIDE.



THE GOTHIC ARCH.

tecture—the arch; not merely the lofty arches open to the sky, but those down on the street that feature the walls of the long inclined approaches. True, most of these along Frankfort Street were early bricked in to bring the city revenue as fireproof warehouses; but even these have some special weirdness and mystery precisely because they are structural arches of Brooklyn Bridge. Where Cliff Street passes under, or William Street, the imagination is straightway invited far afield by that damp vault-like chill that belongs to remote romantic places. In summer such spots are the friend of tired carters and horses who spend the noon hour in their cool shade, but in winter they are the enemy of those who must face the icy eddies and gusts that scutter through. In winter, too, of an early evening twilight one sees here, all too often, little Italian and Greek children from nearby Cherry Street bent over a huge load of empty wooden boxes begged from some arch warehouse, tying them securely together there in the murky gloom preparatory to dragging them home for kindling. Such groups seem to put the feeling of the early nightfall and of the cavernous arch into a sad European picture.

But from up above on the monster bridge all small and separate pictures are lost. From there the whole island city can be seen—distinctly a New World city, since the very essence of the mass is steel. Only immediately below where it ravels out to an edge at the base of the mighty stone tower does steel *not* dominate. Here is that openness which one leaves the canyons of Broadway to seek. The little gable-roofed houses are set well back from the water and firmly planted as if sure of warding off the encroachment of the skyscraper for many years to come. They hold their own, humble and brown, for the distance of several streets back from the shore; then the great monsters rise white and glistening new behind them, stopping at different heights just short of the sky. Even the water on the bridge side of Manhattan Island seems somehow more expressive of olden times than does the Hudson water-front. The scores of ferry boats darting back and forth like a shuttle are absent, and only a few slow lumbering ones ply their trade in spite of the bridge; absent too, are the monster liners of the western side. "The liner she's a lady," so runs Kipling's verse, and a lady liner of the ultra-modern sort is more at home in the shadow of the steel Whitehall or the West Street Building than under the venerable, traditional masonry of Brooklyn Bridge.

THE ARCHITECT'S LIBRARY

BOOKS ON COLONIAL ARCHITECTURE

By RICHARD FRANZ BACH

Curator, School of Architecture, Columbia University

PART II. Secular Buildings

AT the very beginning of building activity in this country we must expect an uncouth quality in secular buildings as well as in churches. The first duty was to repel the Indian, to render the earth productive, to establish mutual protection and a rudimentary mode of government. During this time of beginnings the churchly and secular functions were often combined, as has been indicated in a previous article, in the type of structure known as the meeting house. This combination operated to the advantage of the church building, owing to the general sanction given to the importance of religion in Colonial life; while the public or governmental or other secular function, which always develops more slowly in a quasi-freethinking community, was temporarily forced into the background. Even when our early architecture has found its channel, in so far as any purely formative type of art may be said to follow a set course, its public buildings generally considered are not important. The first noteworthy results in this field must be looked for as a result of the growing Federal and civic conscience that followed the establishment of the Union; in other words, during the Republican period. But the public structures of the new-found Republic were restricted to the requirements of a few large cities. The National Capitol building was necessarily a transitory conception for a number of years, since the very site of the capital city was in discussion, from the standpoint of party politics as much as from that of economic and artistic availability. In the former connection the prospective national centre was literally a shuttlecock, as any record of the first administrations will attest.

The church edifice holds pre-eminence in point of time in the architectural growth of this country. It is followed by the public building, smaller, less expensive, satisfying only immediate needs, architecturally much less pretentious than the church, and always a more or less tardy growth, if for no other reason than that there was demand for but few buildings of fine character in the earliest times. Third to develop was the dwelling house. From this it should appear, then, that the currents of domestic and of public architecture, although constantly present, were subdued; they have with few exceptions

nothing of importance to offer in design for some time. Utility characterizes the earlier secular buildings of all types; there were even vestiges of a Colonial commercial architecture, of negligible value to be sure in point of its contribution to the history of style development, but sternly useful, as were the first meeting houses and the first dwellings.

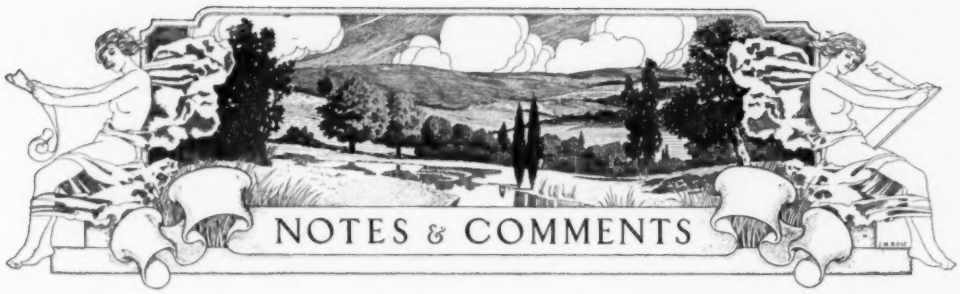
Our formative public architecture, not to mention the very few examples of secular architecture of other varieties, exclusive of residences of later developed type, has received but slight attention at the hands of the writers. Of course, the general works already referred to at the beginning of this series of papers will offer a certain amount of material, especially in the way of plates, and always restricted to a limited number of chosen buildings; notable are a few examples in *The Georgian Period*. We sorely need, however, and should welcome, a general volume on the early secular buildings, similar to that by Mr. Embury on *Early American Churches*, not too large, but well illustrated, surely containing plans and sections wherever feasible. This might readily be an inclusive work, for the structures concerned are not numerous; it should be provided with a bibliography and a definite chronological table, in so far as one man's labor may be depended upon to gather accurate information as to the chronology of these forerunners of our public architecture. The volume would logically assume the role of an entering wedge into a field not yet exploited, nor even thoroughly explored. What is more, it would fill a dire need in the study of architectural history in this country. In the second place, detailed works upon individual buildings would follow closely upon the heels of this first general work. There should be thorough and thoughtful sets of plates, with a minimum of text, always with a local or subject bibliography and chronological tabulation. The plates should be considered on the basis of a permanent record, as works of final reference, and should therefore contain all necessary information in the form of accurate measurements for all exteriors, plans and any useful sections. Besides, these plates should offer details of doors, windows, balustrades, mouldings, orders; while in the case of especially interesting examples, larger scale details should be given of special motives, occasionally sections of stairways, or entrance porches. Finally, and of considerable historical interest, there should be drawings—either isometric or in perspective—of certain features of construction, as again of stairways or mantels or roof trusses. The buildings being so few in number, the work involved would not be of prohibitive quantity or extent and the undertaking need not require excessive attention from any one person or group, if it be judiciously disposed or apportioned according to the localities in which the few remaining buildings are situated. It would seem that civic pride in the Eastern States should demand that such monuments be suitably described, measured, drawn and otherwise reproduced, not only for purposes of record, but also for those of study. The great drawback in the detailed study of European civic monuments has often been the defection of adequate records of this sort. There is, then, in this country every opportunity of preserving an architectural record of beginnings practically intact. Assuredly each day should add to this record, before the majority of the buildings have been condemned to make space for new ones on the same sites, or have been restored out of semblance to original forms, hopelessly altered to suit modern purposes, or even destroyed for commercial reasons. To emphasize this matter further let us briefly scan the field of our public and other secular architecture during the time under discussion.

At the outset we must allow for a number of buildings which were of wood, slightly built, which rapidly gave place to more elaborate structures, sometimes of more permanent material, or else were of such unpretentious character as to be better classified as barns or sheds. Many such buildings have been mentioned, but no architectural treatment was granted them by the writers for the reason that they were occupied usually with a history or local description. What is more, the historian relies in great measure upon State house records, personal diaries, and similar chronicles in which the most ac-

curate descriptions are invariably indefinite when they are not lacking entirely. However, we find statements about the existence of jails, armories, theatres and the like in more modern annals of old cities. Thus, by way of illustration, we might mention David Ridgeley's *Annals of Annapolis*, Joel Munsell's *Annals of Albany*, Charles W. Brewster's *Rambles about Portsmouth*, Col. J. T. Scharf's *Chronicles of Baltimore*, or Bishop Meade's *Old Churches, Ministers and Families of Virginia*. Such references as these works may offer can only be of use in compiling the historical data concerning any buildings that no longer exist, although they are occasionally of service in the conjectural restoration of a plan from a wordy description, in which figure such inadequate terms as "large room to right of hall" and "office entered through middle room in lower part of the edifice." Certain works of this kind have appeared occasionally, however, in the guise of faithful compilations of excerpts from contemporary newspapers; these are apt to be fairly accurate, and among them may be mentioned Elihu S. Riley's *Ancient City; a History of Annapolis*.

In this connection also we should give due credit to volumes like those of Lyman P. Powell, who has published three, entitled, *Historic Towns of the Southern States, Historic Towns of the Middle States*, and *Historic Towns of New England*. These volumes are very useful for the reason that they partake of the guide book character, which demands accuracy and a thorough acquaintance with the monuments in question. There are other works of similar nature which the student of Colonial architecture, especially of secular buildings, must call into requisition; these may be included under the general title of regional works. The series by Mr. Powell would be the most inclusive of these; but individual cities have at times issued descriptive books concerning their own histories and buildings, and when such publications contain series of articles on various aspects of the civic life of the community concerned, they may generally be relied upon for purposes of study. Unfortunately cities have not availed themselves of this means of recording and making known the existence of architectural landmarks within their limits. As an example of this type of publication, although not produced as a splendid volume by any means, might be cited the board covered pamphlet entitled *The Portsmouth Book*, which contains a series of papers on various parts of Portsmouth, its churches and other buildings, as well as an article by R. Clipston Sturgis on the architecture of the city.

(To be continued.)



NOTES & COMMENTS

The Schenley Park Approach Competition.

There is a growing impression that competitions for the solution of landscape and architectural problems are wasteful and inadequate. Unfortunately this feeling is strengthened as a result of the recent Schenley Park competition. This competition was for a new approach to Schenley Park, Pittsburgh, and was held under the auspices of the City Planning Commission and the Art Commission of that city. The area involved is adjacent to the Carnegie Library and the Forbes Baseball Park. It covers an area of about twenty acres and, in its present state, consists largely of a deep ravine, which the park approach crosses by means of a stone arch bridge.

The problem was essentially a traffic study for providing an adequate approach to the park and the selection of a site for the Schenley Memorial Fountain, a stone sculptured group surmounting a basin sixty feet in diameter. The neighboring buildings affected but slightly the nature of the plan. The solution of the problem, therefore, was controlled largely by the existing features, such as adjoining streets and boulevards, Bellefield Bridge and the expansive view of the park and outlying districts of the city to the south.

The program was carefully drawn, and forty-five competitors submitted designs, each set of plans consisting of a general plan rendered in black and white wash and a skeleton plan, both at a scale of forty feet to the inch, besides a key map at a scale of three hundred feet to the inch. Nine hundred dollars was awarded in prizes to the three best plans as selected by the jury. The jury for the award of prizes was composed of Henry Hornbostel, architect; George S. Davison, civil engineer, and Berthold Frosch, landscape architect.

The plan prepared by Horace W. Sellers and H. Barthol Register, architects, of Philadelphia, was awarded first prize; Raymond M. Hood, architect, of New York, was given second place, and Arthur F. Brinckerhoff, landscape architect, of New York, was awarded third prize.

The plans rated first and second solve the problem alike, being almost identical in the disposition of the essential features. Both are rigidly formal with arbitrary axis lines located alike. The third plan gives first consideration to traffic regulation and the placing of the Schenley Memorial Fountain on center with Grant Boulevard, the principal approach street to the park. Unnecessary paved areas are eliminated and the open spaces given largely to lawn area. Allowance is also made for the naturally beautiful views to the south, which quite properly should be considered in a design of this character.

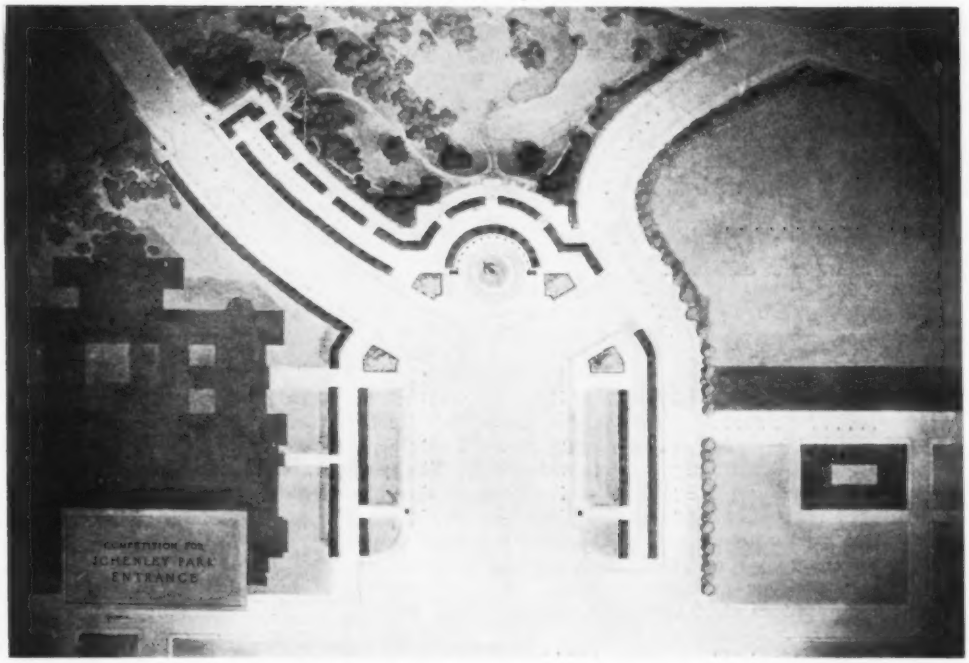
The report of the jury read in part as follows: "We have given careful consideration to the submitted designs and have, by majority vote, assigned designs Nos. 4, 1 and 27 to, respectively, first, second and third place.

"As between designs Nos. 4 and 1 the jury is unanimous in giving preference to No. 4. However, a minority report, embodied herewith, is submitted as expressing the belief of one of the jurors that design No. 27 should be given preference in the award over Nos. 4 and 1.

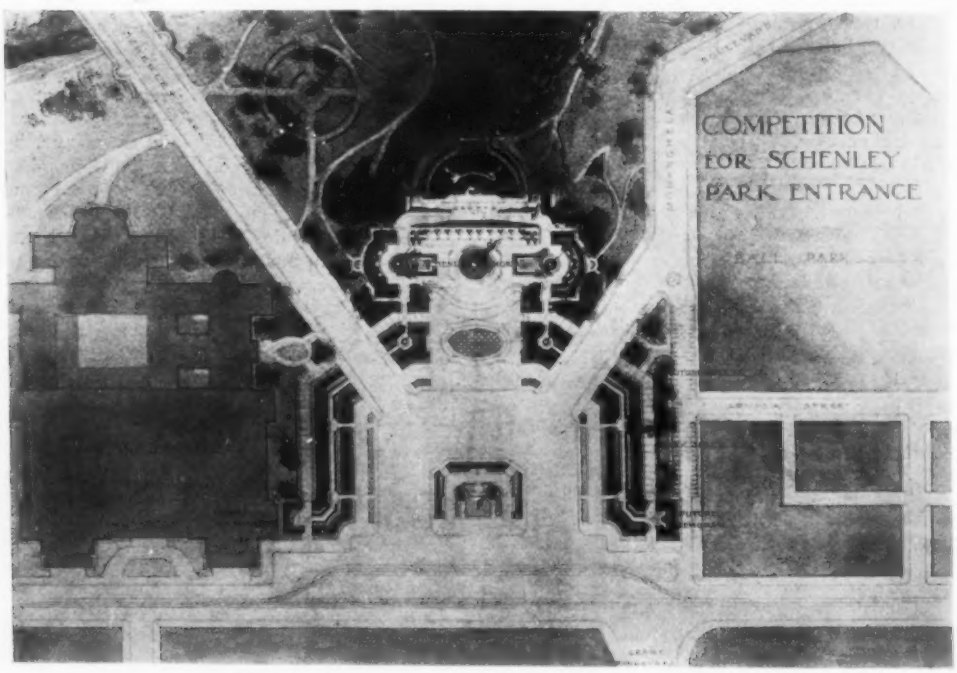
"The submitted plans were generally of two types, one being the more impressive formal or 'plaza' scheme, with the lines of Forbes Street and Carnegie Institute controlling, the other being informal and consisting of the projection of Grant Boulevard through the territory and treated with little emphasis at the point where this extension enters the area to be planned."

Commenting upon the award of the jury Mr. Charles Downing Lay writes in the July number of "Landscape Architecture":

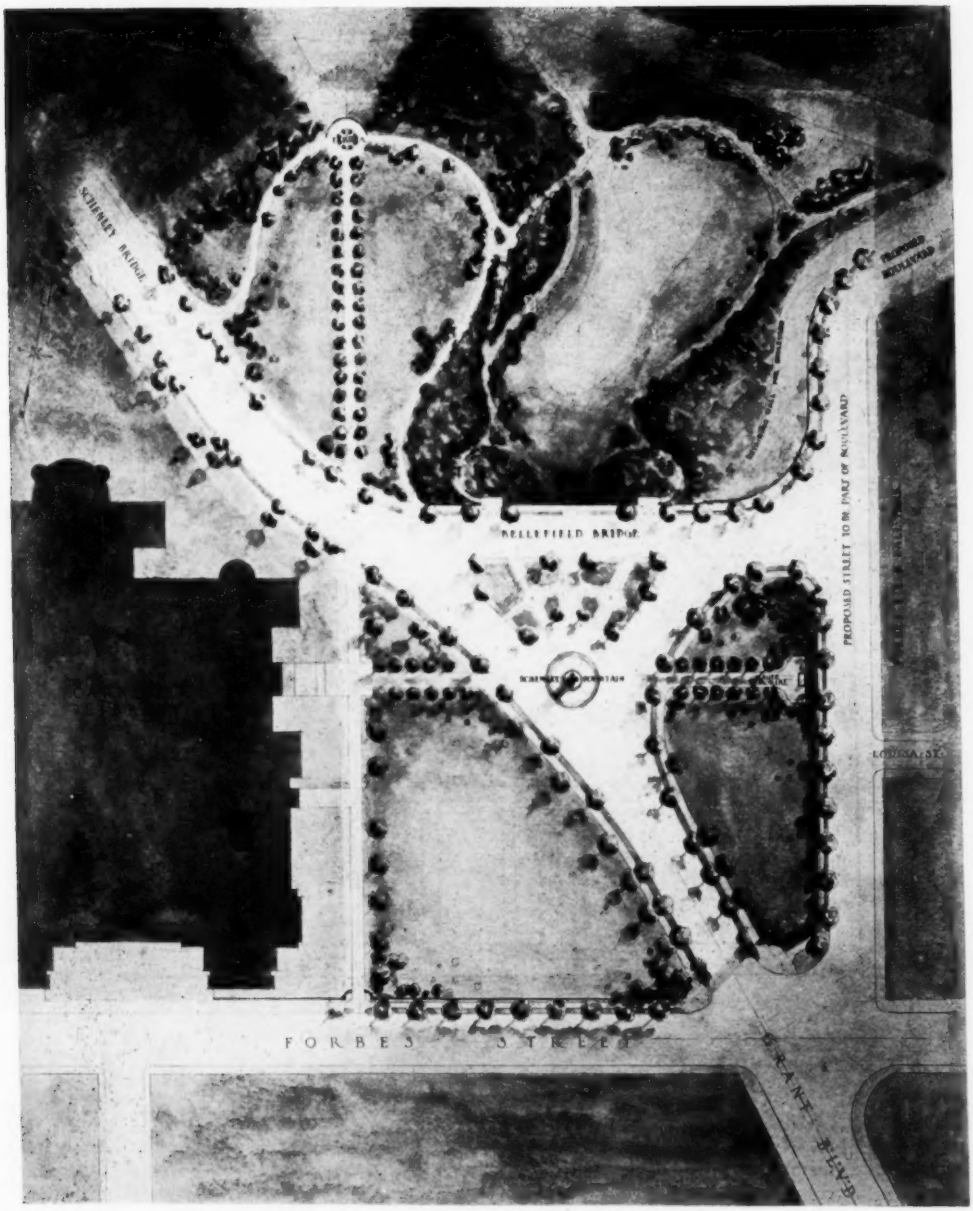
"The first two plans are similar in char-



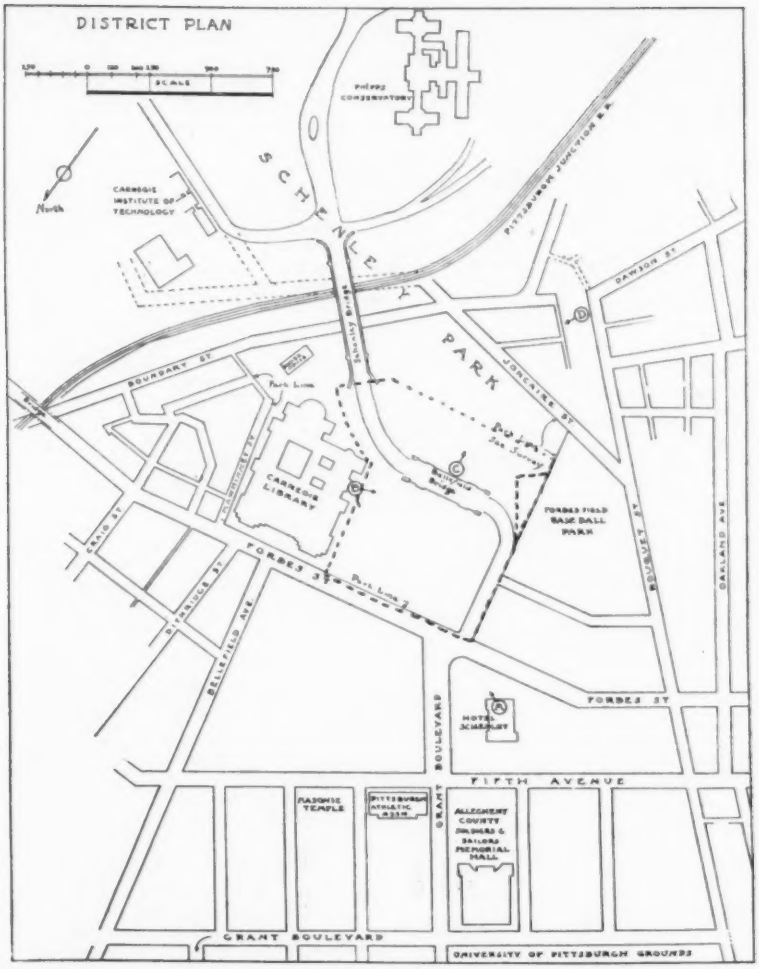
FIRST AWARD—DESIGN BY HORACE W. SELLERS AND H. BARTHOL REGISTER.



SECOND AWARD—DESIGN BY RAYMOND M. HOOD.



THIRD AWARD IN COMPETITION FOR SCHENLEY PARK ENTRANCE—DESIGN BY A. F. BRINCKERHOFF.



DISTRICT PLAN, FROM PROGRAM OF COMPETITION FOR SCHENLEY PARK ENTRANCE.

acter and suggest very strongly the solution of the problem proposed by Mr. F. L. Olmsted (page 104, 'Pittsburgh: Main Thoroughfares and the Downtown District,' 1910). Mr. Olmsted's plan, however, was based on a revision of the street system, which is obviously desirable, yet which the competitors were not allowed to consider in the preparation of their plans. Without this change in the street system, these plans are either of them too grandiose for the situation; for it must not be forgotten, in admiration of the skill of the rendering and the beauty of the design in black and white, that Grant Boulevard, the main thoroughfare of the park, enters this large plaza from the corner, and that actually the only people who will see or enjoy its symmetry are those who may live in some apartment house to be built on the other side of Forbes Street.

"In both these plans there is evident a common tendency to disregard scale and to forget the pedestrian. This was recognized by the jury, who suggested a reduction and shifting the axis farther to the west, nearer Grant Boulevard. In the Sellers-Register plan, for instance, the plaza is roughly 245 by 420 feet, or 2.3 acres, all roadway, with, we will suppose, a pavement of macadam or asphalt. To cross it at the narrowest place, one must walk a

whole city block in the glare of the sun and amid the confusion of vehicles. Or will it be roped off, as we do in New York, confining the traffic to small areas? If this is likely to be done, why not do it now, with turf or foliage areas, permanently bringing the scheme in scale with ordinary human beings?"

After reading the program and report of the competition, it becomes evident that the jury favored a formal design but were unable to find an adequate plan embodying the formal plaza type in any of the forty-five exhibits. The existing controlling conditions of the problem do not lend themselves to the creation of a Beaux-Arts type of plan, as the competition demonstrated.

In designing a building it is quite feasible to say that we will have the French Renaissance or the Gothic type of structure and to obtain a satisfactory result, usually with perfect propriety and good taste. Successful landscape design, however, calls for a rational treatment which often precludes a rigid adherence to a type or style. In order to solve a problem in landscape architecture, existing conditions, and especially those which cannot be changed, must be considered. This calls for judgment, pliability and a keen sense of proportion, keeping always in mind the ultimate practical uses and also the effect that the finished work will have upon the people who are to see and use it.

A landscape design should not only possess beauty, dignity and symmetry, but should provide frankly and adequately for the use and enjoyment of the people. Nationality, location and climate, which have such an important influence upon human activities and habits, must be seriously taken into consideration. The formal plazas and piazzas which are so impressive and admirable in Spain and in Italy are so because of the architectural harmony, climate and the civilization peculiar to those countries. Similar schemes would be glaringly out of place if transplanted to a modern city of northern United States.

Assuming, as we have done, that the award was dictated by a preference on the part of the jury for a design of the formal type, this preference constituted a factor which was not expressed in the program. The presence of unexpressed factors is one of the chief defects of competitions as at present conducted.

Dignity, economy of construction and adequate provision for traffic were factors called for in the program. Judged on these points, Mr. Brinckerhoff's plan, the least formal of the three winning designs, has more merit than the report of the jury credits it with.

CARL F. PILAT.

The Augsburg Picture Gallery.

In his articles in the August and September issues of The Architectural Record Dr. Benjamin Ives Gilman, of the Boston Art Museum, points out the fallacy of the general use of top light in museums, and the superiority of light from windows set high in the walls. The greatest difficulty in extending the use of this method, as he remarks, is the lack of precedents. It may therefore be of interest to gather examples where such lighting has proven itself advantageous.

One such example, which seems comparatively little known, is the Royal Picture Gallery at Augsburg, in Bavaria. The adoption of this type of lighting seems to have been due, not to an actual preference, but to its greater ease of installation, as the building was not erected for the uses of a museum, being the former church of St. Catharine, a structure of the Renaissance period, with a double nave but without aisles.

The museum hall is about forty-five feet wide, fifty feet high, and somewhat over two hundred feet long. It is vaulted in square bays, the vaults being supported by a central range of columns, spaced some twenty-two feet apart. Both the vaulting and the upper portion of the walls are whitewashed, the lower part of the walls, to a height of about eighteen feet, being of a darker color to form a background for the pictures. The hall is divided into three rooms by cross-walls, pierced only by small doors, and in addition a low screen crosses the hall at each column, with a space of seven feet for a passage at each end. The smaller pictures of the collection are hung on these screens, the larger ones on the side-walls, where the distance from which they can be seen is twice as great.

The windows on the south side of the church have been blocked up, and those on the north glazed with clear glass. There is one window in each bay, seven feet wide by twenty-two feet high, the sills being twenty-two feet from the floor. The lighting, being entirely from the north, and further diffused by reflection from the white walls and vaults, is remarkably satisfactory, there being an abundance of light throughout, with practically no glare or reflections.

On the south side of the main building a few small chapels have been used for additional hanging space. Here also the lower part of the windows has been blocked up, but since the light is from the south the result is somewhat less satisfactory.

This is, of course, by no means the only case of a museum installed in an old church. The Musée Lapidaire at Arles, the Historical Museum at Basel, the main gallery of the Museum at Toulouse, may also be cited as examples, but in no case have the proportions of the structure produced so good a result, one which, in fact, seems almost ideal so far as lighting is concerned.

JOHN J. KLABER.

A Simple House Front.

A few weeks ago the writer wandered along Fifth Avenue and through the cross streets from Fifty-ninth Street to Seventy-second Street, trying to find the ideal house façade of from thirty-five to forty-five feet in width in the centre of a block. It was surprising how many there were which were almost very good and how few that were thoroughly satisfying.

The house at 12 East Sixty-ninth Street, built for James W. Ellsworth by W. W. Bosworth, stood out notably among the various buildings in its simplicity bordering almost upon nakedness, but notwithstanding, or perhaps because of this quality, it possesses a gentlemanly character which is not so distinctly evident in some of its more ornate neighbors. There is something a little bit tight about the square balconies at the second story windows. It is apparent that these windows extend to the floor and that the balcony is necessary as a protection, but one does not understand why they were not either placed between jambs or else given a greater projection so as to accommodate plants and potted trees, or at any rate to give one the feeling that such decorations could be accommodated. Just now one feels it borne in on one that the balcony is not large enough to stand on, nor even t give room for pots, and that the slight proj tion does not add to the beauty of the com osition.

The doorway and its approach are designed in fine taste. They are the last word in simplicity, and one cannot help feeling that the owner of such an entranceway must have long traditions of Boylston Street or of Washington Square.

The New Corn Exchange Branch Bank.

The Eighty-sixth Street Branch of the Corn Exchange Bank, in New York, H. T. Lindeberg, architect, is a very delightful essay in bank architecture. Situated, as the building is, in the middle of a block in a residential district of the town, it has properly something less of monumentality and something more of the domestic feeling than is usually found in a well designed bank building in the financial district, but nevertheless the design is big, simple and appropriate to an important financial institution. It combines simplicity, interest, refinement and sentiment to a rare degree. It is particularly gratifying to find worked into the design emblems suggestive of the name of the bank. Brains as a decoration add considerably to the merit of knowledge. Mr. Lindeberg never feels it necessary to adhere strictly to architectural precedent, but to our more conservative minds, the design would have been bettered by giving a real base to the pilasters or at any rate a rudimentary basement to the whole composition.

The Alhambra.

The Spanish architect, Cendoya, has instituted careful investigations in the archives at Granada concerning the Hispano palace—Moresque citadel—in order to insure the absolute correctness of his restoration. Interesting facts have come to light as the result of his search. Among other things he has discovered that the site of the present buildings, which were begun in 1248, bears traces of four successive palaces, each including mosque and harem courts, and, according to a German contemporary, we shall now learn the true history of the Forty Towers.